

ALLEGHENY COUNTY  
DEPARTMENT OF HUMAN SERVICES  
**PROPOSAL COVER PAGE**

**SOLICITATION: Evaluation of a Predictive Risk Modeling Tool for Improving the Decisions of Child Welfare Workers**

Contact Information
<b>ORGANIZATION OR INDIVIDUAL: AUTHORIZED REPRESENTATIVE:</b>
<b>Name:</b> [REDACTED] <b>Title:</b> Principal
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<b>WEBSITE:</b> www.deloitte.com

Proposal Information
<b>DATE SUBMITTED:</b> 1/4/2016
<b>AMOUNT REQUESTED:</b> [REDACTED]
<b>*PROPOSAL ABSTRACT:</b> Conduct a process evaluation and impact evaluation of Allegheny County Department of Human Services Predictive Risk Modeling Tool.

\*Please limit your response to 750 characters

**Please check each of the following before submitting your Proposal:**

☐ My firm is registered with the Allegheny County Department of Minority, Women and Disadvantaged Business Enterprises

☒ By submitting this proposal, I agree that, if offered a contract award, I will comply with the standard County terms and conditions for County contracts.

☒ By submitting this proposal, I agree to comply with DHS Cyber Security, EEOC/Non-Discrimination and HIPAA requirements.

☒ By submitting this proposal, I certify and represent to the County that all submitted materials are true and accurate, and that I have not offered, conferred or agreed to confer any pecuniary benefit or other thing of value for the receipt of special treatment, advantaged information, recipient's decision, opinion, recommendation, vote or any other exercise of discretion concerning this RFP.

# 1. Executive Summary

Deloitte Consulting LLP (“Deloitte”) appreciates the opportunity to assist Allegheny County DHS with the evaluation of your new predictive risk modeling (“PRM”) tool focused on referrals and screening decisions. We have put together an engagement team that includes professionals grounded in advanced analytics, process analysis, and impact analysis across health and human services and child welfare specifically. We recognize that you have an important decision to make regarding the selection of your partner in evaluating the impact of PRM on end users, interested parties, and the variability of future screening decision results. As you weigh your consulting support options, please consider the following factors that position Deloitte to support ACDHS on this critical child welfare initiative.

**World Class Advanced Analytics Capabilities:** Deloitte has a demonstrated track record in providing advanced analytics consulting services in multiple industries. We differentiate ourselves in the marketplace with our end-to-end capabilities – from model development through implementation. Our practice is at the cutting edge of industry research and development, publishing over 100 articles, speaking at over 100 events, and teaching the Casualty Actuarial Society limited attendance predictive modeling seminar for over a decade. In December, our proposed project principal, [REDACTED],

[REDACTED] We support our clients through all stages of the end-to-end analytics journey: 1) model development, 2) scoring engine development, and 3) business implementation.

**Unparalleled Health and Human Services Experience:** Deloitte brings expertise in health and human services through our proposed team of HHS analytics professionals, who each have on-the-ground experience in implementing HHS transformation projects across the country. Additionally, our team is joined by [REDACTED] and focuses much of her research on the experience of child welfare case workers. Additionally, with Deloitte’s deep child welfare expertise and [REDACTED], no partner organization is better situated to perform this process and impact evaluation.

**Practical Experience Implementing Predictive Models:** For almost two decades, we have helped organizations successfully implement custom predictive models. It is important to note that even the most accurate PRM has minimal business value if it cannot be successfully incorporated into the day-to-day workflow of ACDHS’ case workers. Our business implementation skills include current state review, future state summary and gap analysis, reason message development, business rules development, employee surveys, change readiness assessment, communication plans, training plans, training guides, FAQ development, and the development of performance metrics to measure and monitor PRM success. We have helped our clients significantly improve outcomes through early signal detection, targeting case worker focus on the right cases, and the use of behavioral economics to “nudge” the optimal behaviors.

## 2. Narrative – Process Evaluation

RFP Reference: 2. Narrative, Page 7

### Organizational Experience

RFP Reference: 2. Narrative, Page 7

- Describe your specific experiences in the study of decision-making under risk, quasi-experimental methods in evaluation of field trials, or child welfare and human service evaluations.
- Include information about the personnel who will be involved in the evaluation (including CVs/resumes and an organizational chart which will not be counted in the page limit)

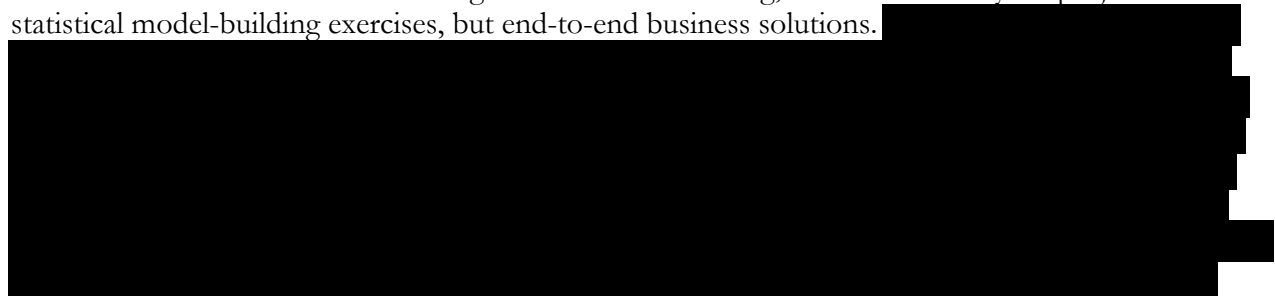
#### *Deloitte Advanced Analytics Practice*

Deloitte's Advance Analytics and Modeling (AAM) practice, together with our Health & Human Services – Child Welfare practice drives the development and evaluation of predictive models in health and human services organizations. Our AAM practice is a market-leading consulting and advanced analytics practice that provides end-to-end business solutions to our clients. From its earliest days, the focus of AAM has been designing, building, and implementing predictive models and other data products that enable better decision-making under risk and uncertainty. Decades of research in such fields as psychology and economics have consistently concluded that human decision-makers make more consistent, accurate, and economical judgments and decisions when they use data and predictive models rather than relying on unaided judgment. Our own experience is consistent with these findings. For example, AAM models are used to:

- Help child support case workers better prioritize their activities, and enable them to focus more on prevention than enforcement
- Help university admissions officers better evaluate which candidates are most likely to succeed upon matriculation
- Help human resource managers better evaluate which job candidates are most likely to succeed on the job
- Help fraud investigators and claims adjusters focus their efforts on the riskiest cases
- Help insurance underwriters make better risk selection, classification, and pricing decisions
- Help risk managers better evaluate which physicians are most likely to be sued for malpractice, or which departments are potential “hot spots” for workplace injuries.

This partial list of examples illustrates the universality of the principle that predictive models and other data products enable better decision-making in risky and uncertain situations.

Consistent with our focus on enabling better decision-making, AAM views analytics projects not as statistical model-building exercises, but end-to-end business solutions.

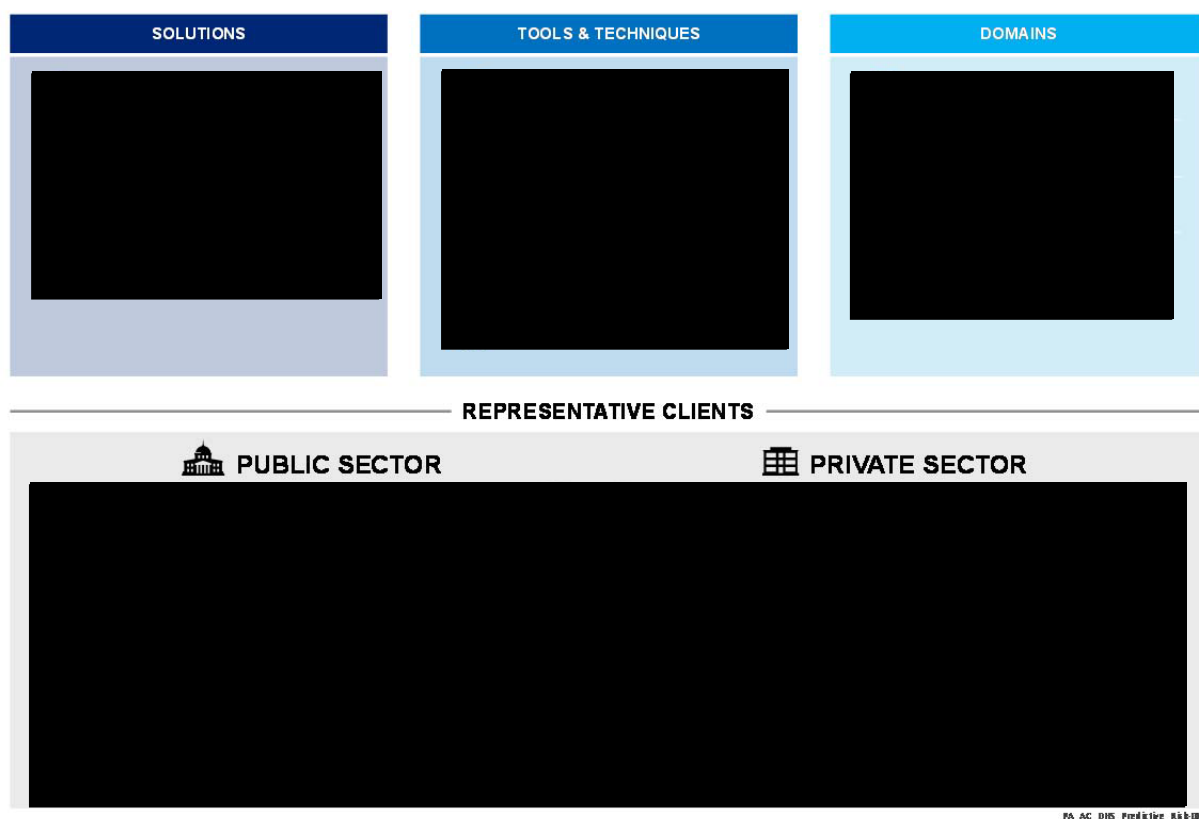


[REDACTED]

We use specialized techniques and tools and various internal and external data sources to drive business strategy, performance, and decision-making. [REDACTED]

[REDACTED] We know how to apply quantitative techniques to solve complicated business problems, turn data into insight and foresight, and enable more informed decision-making.


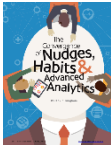

## Deloitte's Advanced Analytics & Predictive Modeling Practice



**Figure 1. Deloitte's Advance Analytics Experience**

Deloitte brings experience in advanced analytics across domains, industries and toolsets to ACDHS.

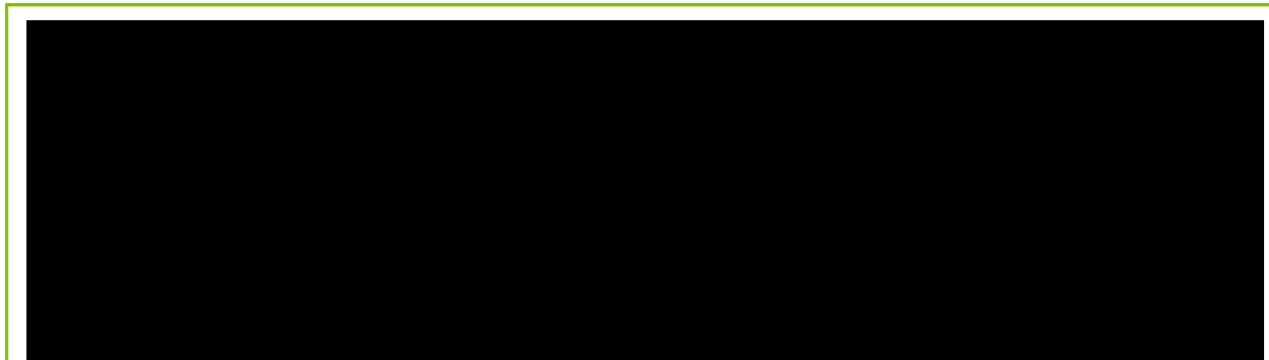
Our practice regularly contributes to analytics publications – for example, [REDACTED] recently published the following articles:

Article	In Brief
 <b>“The Challenges of Implementing Advanced Analytics,”</b> <i>PropertyCasualty360.com</i> <a href="#">(LINK)</a>	<p>“An important part of the analytics journey is overcoming the numerous challenges an organization encounters when experiencing the end-to-end development and deployment of predictive models.”</p> <ul style="list-style-type: none"> <li>• Executive ownership</li> <li>• IT involvement</li> <li>• Available production data vs. cleansed modeling data</li> <li>• Project management office</li> <li>• End user involvement and buy-in</li> <li>• Change management</li> <li>• Explainability vs. the “perfect lift”</li> </ul>
 <b>“The Convergence of Nudges, Habits &amp; Advanced Analytics,”</b> <i>Contingencies Magazine</i> <a href="#">(LINK)</a>	<p>The convergence of big data, advanced analytics, and a deepening understanding of habits and how to alter human behavior through data-enhanced “nudges” is rapidly changing the world we live in. This article shares some examples of taking analytics to the next level by statistical thinking and the power of cues, driven by behavioral science, to help improve lives.</p>
 <b>“End-to-End Claims Analytics – An Equation for Financial Success,”</b> <i>PropertyCasualty360.com</i> <a href="#">(LINK)</a>	<p>“In the end, a claims predictive model deployment is more than just a bunch of actuaries, statisticians and PhD’s having fun with numbers. The end-to-end analytics journey includes:”</p> <ul style="list-style-type: none"> <li>• Model deployment strategy</li> <li>• Claims predictive model development</li> <li>• Scoring engine development and technical integration</li> <li>• Business and operational implementation</li> <li>• Organizational change management</li> <li>• Performance management and loopback improvement</li> </ul>

**Figure 2. [REDACTED] Publications**

Leaders in Deloitte’s Advanced Analytics practice regularly contribute to a range of industry publications.

Deloitte is working closely with analytics centers across the country on topics that matter to our clients and has established collaborative partnerships with a number of universities.



**Figure 3. Deloitte's Support of University Analytics Programs**

Leaders in Deloitte's Advanced Analytics practice support a range of University programs across the country.

### *Decision-Making Under Risk*

Deloitte has extensive experience in designing, building and measuring and monitoring the impact of predictive models in a production environment.

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

- [Redacted text]
- [Redacted text]
- [Redacted text]

We would leverage a similar approach to analyze Allegheny County DHS's approach to decision making under risk.

### *Quasi-Experimental Methods*

Deloitte has extensive experience in using quasi-experimental methods to measure and monitor predictive modeling results. Some organizations prefer an experimental, A/B testing approach involving random assignment to control groups, phased-in implementations, and so on. [REDACTED]

Deloitte also understands the common pitfalls where business implementation has fallen short in the past. As part of our work with ACDHS, we will [REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

### *Child Welfare & Human Services Evaluations*

Improving state and local government processes and outcomes stands at the heart of our strategy and operations practice at Deloitte. For more than 40 years, Deloitte has worked with governments throughout the country to improve their operating performance. The result: we have become a nationally recognized leader in state and local advisory work. Our strongest offerings include business process assessments, reengineering efforts that result in transformational and incremental improvement, and engaging our clients in full-scale transformations that improve their business.

Deloitte has a history of successful collaboration with non-governmental organizations, universities, and other partners in the implementation of complex projects. For example, we are currently involved in an engagement with [REDACTED]

We regularly execute analytics projects for a wide range of clients in the public and private sectors, and are frequently engaged to evaluate, design and implement analytics models on behalf of our clients; selected engagements are listed in our references.

To execute holistic evaluations and implement effective analytics capabilities within the complex world of child welfare, ACDHS would be best served to partner with an advisor that brings exceptional experience and deep field knowledge. Deloitte's track record and project experience presents this to

ACDHS, bringing a team with extensive knowledge and appreciation for child welfare operations and practice.

### *Personnel*

Based on the requirements of your proposal, we have carefully selected a team to support the process and impact evaluation.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

The team will also be supported by the following Subject Matter Advisors, who will be directly involved at the appropriate times on the engagement:

- [REDACTED]



- [REDACTED]
- [REDACTED]

## Approach to Process Evaluation

### RFP Reference: 2. Narrative, Page 7

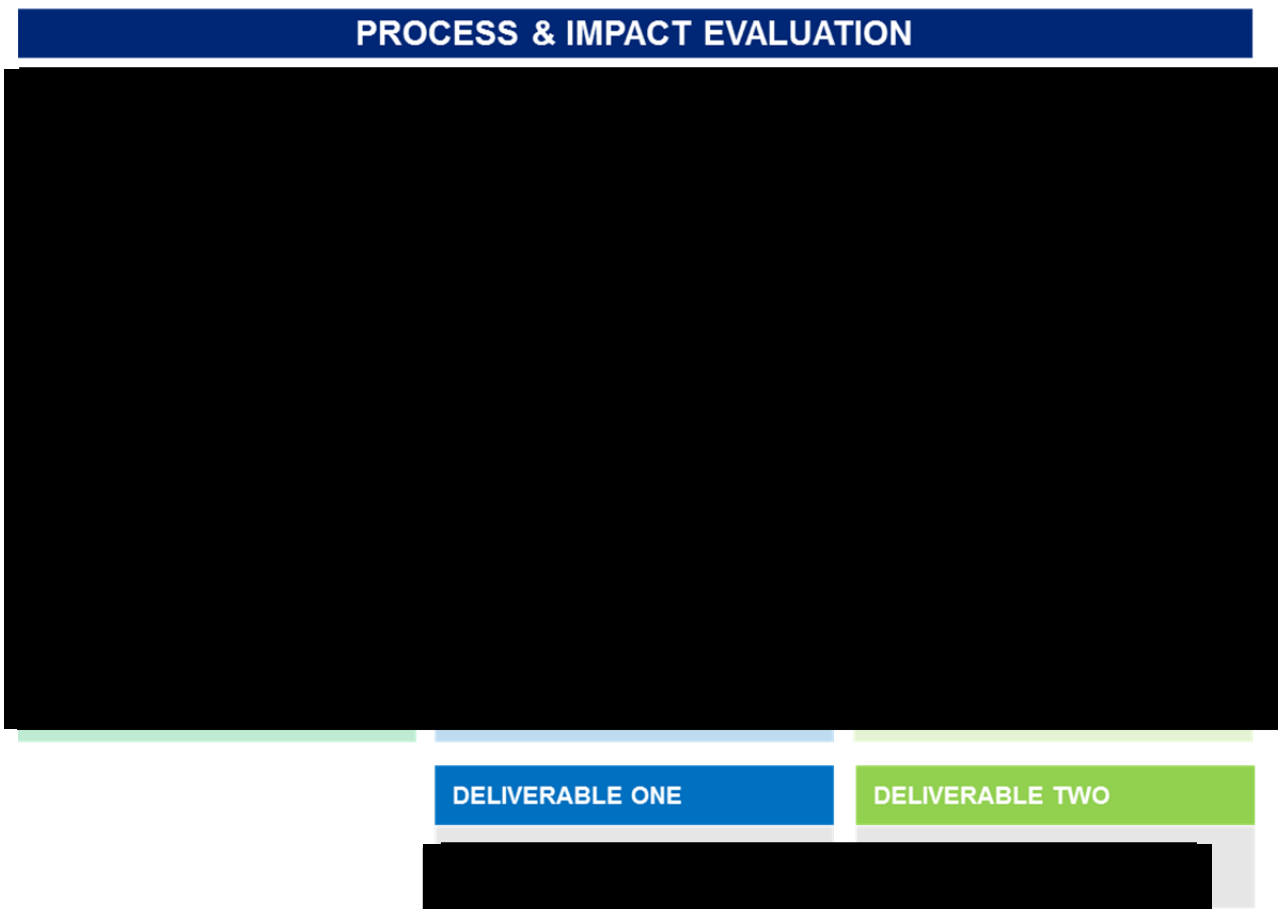
(Please note: Proposers may submit a Proposal to conduct the impact evaluation, the process evaluation or both evaluations. If submitting a Proposal to conduct both evaluations, please complete this section separately for each evaluation.)

- Describe how you would approach the process and/or impact evaluation.
- Describe how you will manage the evaluation, including information on how you will work with self-selected collaborators, the existing research team, and the Allegheny County team.
- Describe in as much detail as you can the analytic methods you would look to utilize in assessing the impact of the PRM Tool in practice.
- Describe the perceived requirements/limitations/challenges.
- Describe a plan for assessing validity/strength of results.

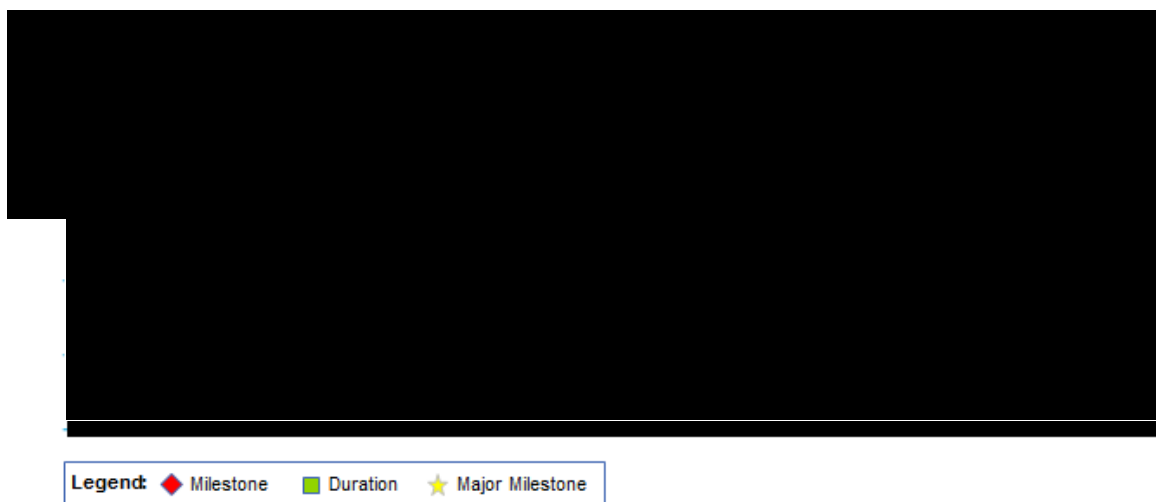
### 1) Describe how you would approach the process evaluation.

[REDACTED]

[REDACTED]



**Figure 4. Deloitte's Tailored Approach to Process and Impact Evaluations**  
Our proposed process includes [REDACTED].



**Figure 5. Proposed Process and Impact Evaluation Timeline**  
Our proposed timeline involves successive steps with periodic milestones and two deliverables.

*2) Describe how you will manage the evaluation, including information on how you will work with self-selected collaborators, the existing research team, and the Allegheny County team.*

Most of our projects involve collaboration with contributing partners, and we believe our work is stronger because of it. We understand that Allegheny County has an existing team from AUT Enterprises, Ltd, that has developed the model, as well as a technology-based team from Deloitte that is integrating the model into ACDHS technology applications. At the start of the project, we will work to establish an appropriate cadence of project collaboration meetings and checkpoints with the identified teams, recognizing that there are related activities continuing in parallel. Additionally, our team will be on-site as needed to support ease of communication and collaboration. [REDACTED] is the primary point of contact for collaboration with all project stakeholders, including other vendors.

*3) Describe in as much detail as you can the analytic methods you would look to utilize in assessing the impact of the PRM Tool in practice.*

As noted above, Deloitte has extensive experience in the measuring and monitoring of the impact of predictive models in a production environment. [REDACTED]

Allegheny County DHS' segmentation strategy (e.g., decile management, quartile management, multi-level thermometer indicator, etc.), whereby PRM scores are clearly bucketed into distinct groups for proper case worker routing, messaging and investigative action, will be the cornerstone of measuring the success of reducing "bad" screen outs and unnecessary screen-ins and investigations.

Leveraging the scored case (i.e., predicted outcome), the case worker's actual screening decision, and case worker/community partner interviews, Deloitte can help ACDHS better understand the impact of PRM on screening decisions in aggregate and by screener, and the impact on disparities in screening outcomes (e.g., racial, economic, etc.) and the impact on disparities in screening outcomes (e.g., racial, economic, etc.).

As an example of the impact our predictive models have had, [REDACTED]

[REDACTED] We would leverage a similar approach to analyze ACDHS's decision making under risk leveraging PRM.

*4) Describe the perceived requirements/limitations/challenges.*

Deloitte recognizes that there are some limitations and challenges to performing the evaluation of PRM for improving the decisions of Allegheny County DHS child welfare workers.

- [REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

*5) Describe a plan for assessing validity/strength of results*

The measuring, monitoring and ultimate evaluation of the strength of PRM's results lie in clearly defining the KPIs and outcomes ACDHS hopes to achieve. It will be important for us to establish up front what ACDHS wishes to accomplish with the use of PRM. [REDACTED]

## 2. Narrative – Impact Evaluation

- RFP Reference: 2. Narrative, Page 7

### Organizational Experience

- RFP Reference: 2. Narrative, Page 7

- Describe your specific experiences in the study of decision-making under risk, quasi-experimental methods in evaluation of field trials, or child welfare and human service evaluations.
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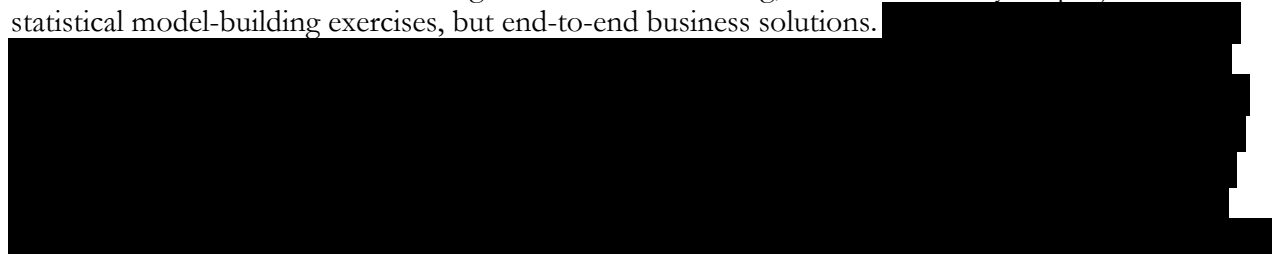
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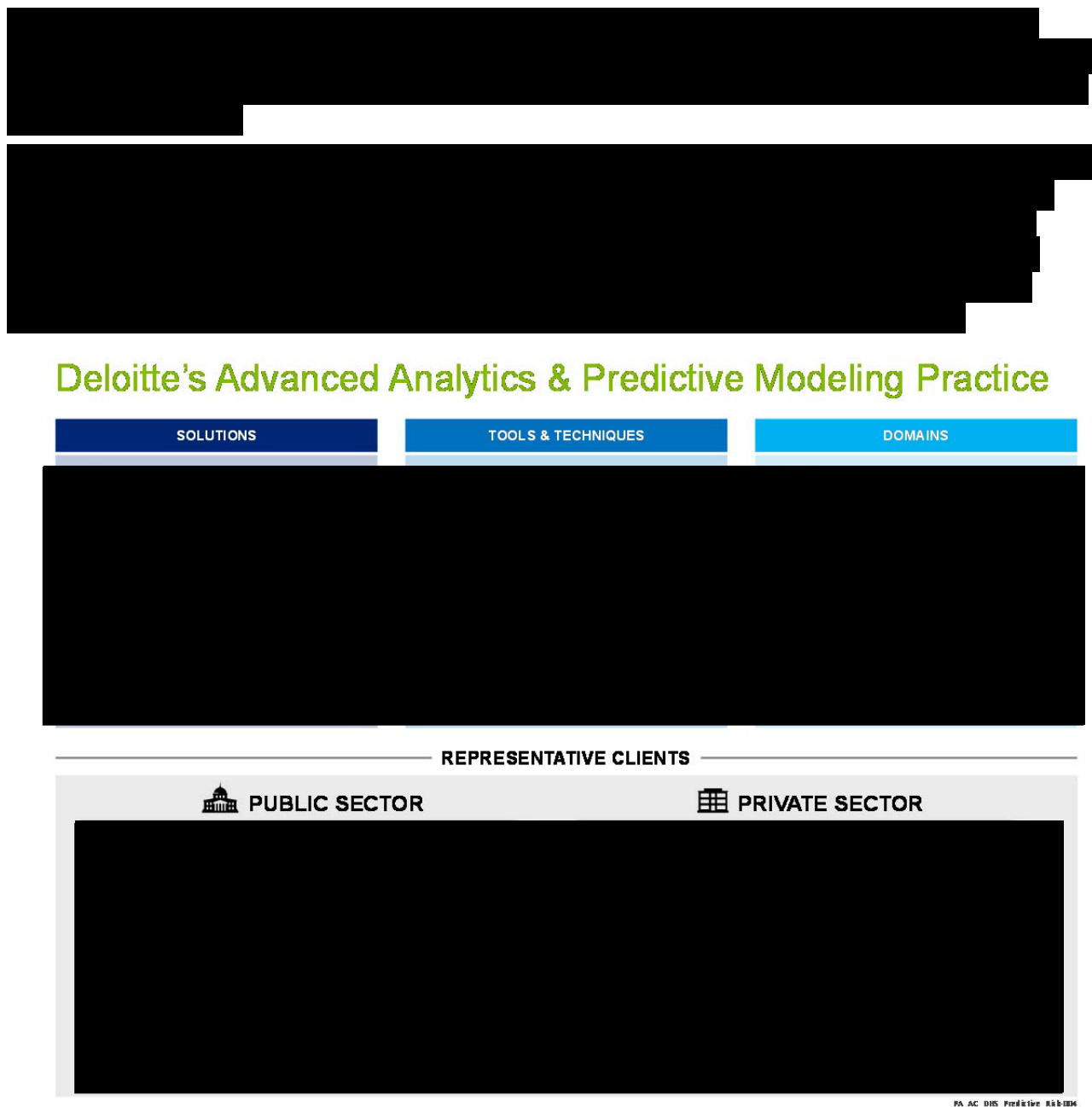
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This partial list of examples illustrates the universality of the principle that predictive models and other data products enable better decision-making in risky and uncertain situations.

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**Figure 1. Deloitte's Advance Analytics Experience**

- Deloitte brings experience in advanced analytics across domains, industries and toolsets to ACDHS.

Our practice regularly contributes to analytics publications – for example, [REDACTED] recently published the following articles:


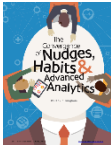

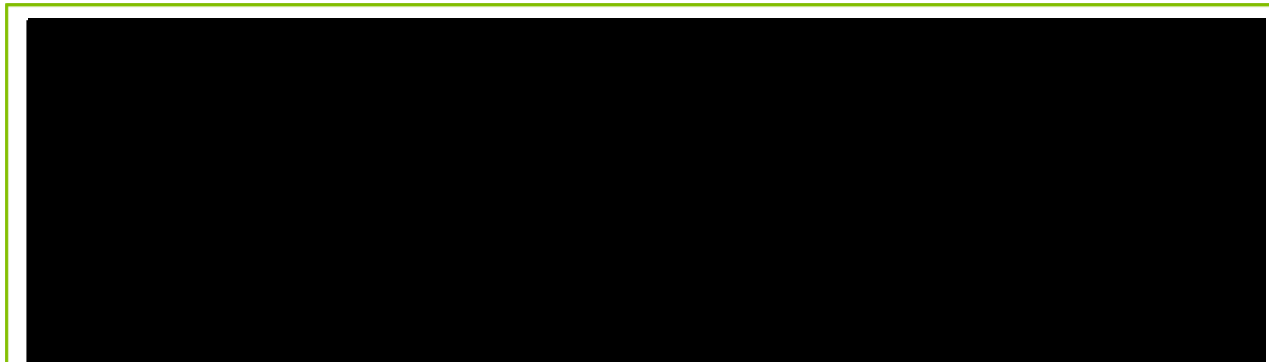
Article	In Brief
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Figure 2. [REDACTED] Publications

- Leaders in Deloitte’s Advanced Analytics practice regularly contribute to a range of industry publications.

Deloitte is working closely with analytics centers across the country on topics that matter to our clients and has established collaborative partnerships with a number of universities.



**Figure 3. Deloitte's Support of University Analytics Programs**

- Leaders in Deloitte's Advanced Analytics practice support a range of University programs across the country.

### *Decision-Making Under Risk*

Deloitte has extensive experience in designing, building and measuring and monitoring the impact of predictive models in a production environment.

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

We would leverage a similar approach to analyze Allegheny County DHS's approach to decision making under risk.



### *Quasi-Experimental Methods*

Deloitte has extensive experience in using quasi-experimental methods to measure and monitor predictive modeling results. Some organizations prefer an experimental, A/B testing approach involving random assignment to control groups, phased-in implementations, and so on. [REDACTED]

Deloitte also understands the common pitfalls where business implementation has fallen short in the past. As part of our work with ACDHS, [REDACTED]

### *Child Welfare & Human Services Evaluations*

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ACDHS, bringing a team with extensive knowledge and appreciation for child welfare operations and practice.

### *Personnel*

Based on the requirements of your proposal, we have carefully selected a team to support the process and impact evaluation.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

The team will also be supported by the following Subject Matter Advisors, who will be directly involved at the appropriate times on the engagement:

- [REDACTED]

•

•

## Approach to Impact Evaluation

### RFP Reference: 2. Narrative, Page 7

(Please note: Proposers may submit a Proposal to conduct the impact evaluation, the process evaluation or both evaluations. If submitting a Proposal to conduct both evaluations, please complete this section separately for each evaluation.)

- Describe how you would approach the process and/or impact evaluation.
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- Describe in as much detail as you can the analytic methods you would look to utilize in assessing the impact of the PRM Tool in practice.
- Describe the perceived requirements/limitations/challenges.
- Describe a plan for assessing validity/strength of results.

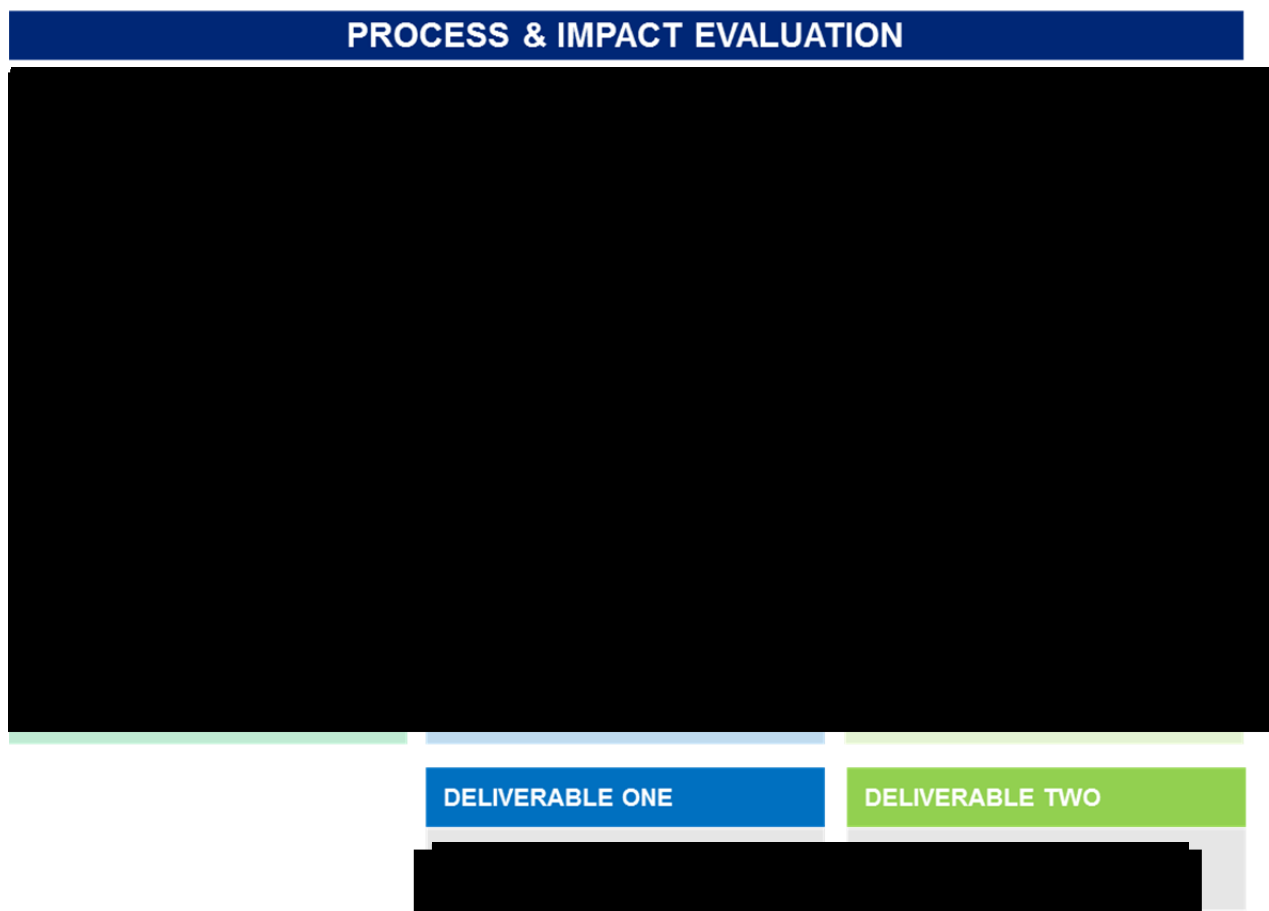
### 1) Describe how you would approach the impact evaluation.

*Note: this response mirrors our response to Question 1 in the process evaluation section.*

Our approach

Additionally, although staff will be assigned to a primary focus ( to the process evaluation and to the impact evaluation), staff may be engaged to support efforts on either thread.

The three steps of Deloitte's process evaluation is shown below.



**Figure 4. Deloitte's Tailored Approach to Process and Impact Evaluations**  
Our proposed process includes [REDACTED].



**Figure 5. Proposed Process and Impact Evaluation Timeline**  
Our proposed timeline involves successive steps with periodic milestones and two deliverables.

2) Describe how you will manage the evaluation, including information on how you will work with self-selected collaborators, the existing research team, and the Allegheny County team.

*Note: this response mirrors our response to Question 2 in the process evaluation section.*

Most of our projects involve collaboration with contributing partners, we believe our work is stronger because of it. We understand that Allegheny County has an existing team from AUT Enterprises, Ltd, that has developed the model, as well as a technology-based team from Deloitte that is integrating the model into ACDHS technology applications. At the start of the project, we will work to establish an appropriate cadence of project collaboration meetings and checkpoints with the identified teams, recognizing that there are related activities continuing in parallel. Additionally, our team will be on-site as needed to support ease of communication and collaboration. [REDACTED] is the primary point of contact for collaboration with all project stakeholders, including other vendors.

3) Describe in as much detail as you can the analytic methods you would look to utilize in assessing the impact of the PRM Tool in practice.

[REDACTED]

[REDACTED]

[REDACTED]

As requested by the RFP, we will not evaluate the actual equation, coefficients, or train/test/validation “lift curve” created by AUT Enterprises, Ltd. We will assume that the equation is optimal as requested.

[REDACTED]

[REDACTED]

#### 4) Describe the perceived requirements/limitations/challenges.

*Note: this response mirrors our response to Question 4 in the process evaluation section.*

Deloitte recognizes that there are some limitations and challenges to performing the evaluation of PRM for improving the decisions of Allegheny County DHS child welfare workers.

- [REDACTED]

#### 6) Describe a plan for assessing validity/strength of results

*Note: this response mirrors our response to Question 5 in the process evaluation section.*

The measuring, monitoring and ultimate evaluation of the strength of PRM's results lie in clearly defining the KPIs and outcomes ACDHS hopes to achieve. It will be important for us to establish up front what ACDHS wishes to accomplish with the use of PRM. [REDACTED]

[REDACTED]

### 3. Budget and Budget Narrative (2 pages)

#### RFP Reference: 2. Narrative, Page 7

The page limit pertains to the budget narrative only. There is no page limit on the budget submission and the Proposer's financial audits.

- Provide a detailed 1 year budget for each type of evaluation that you are proposing to provide in separate Excel documents. Please note that preference will be given to Proposals with a low cost evaluation design.
- If your organization's Proposal to provide the component services described in the Scope of Services Section of this RFP will exceed the amount that DHS has budgeted for an Agreement for the Scope of Services, provide a justification for higher costs in your organization's Proposal.
- Include a budget narrative that explains each item of the proposed budget.
- Please include your most recent financial audit and other documentation providing evidence of your organizational stability. If your organization is for-profit and this information is not publically available, please indicate this in the budget narrative.

We are proposing a fixed price to this engagement. To assist ACDHS in evaluating our proposal we have broken it into the following components:

Project Component	Description	Price
Impact Evaluation	Final deliverable will be written document summarizing the findings of the impact evaluation.	
Process Evaluation	Final deliverable will be written document summarizing the findings of the process evaluation.	
TOTAL		

Figure 7. Estimated Fixed Price Budget

Since the Deloitte U.S. Firms are privately owned partnerships, they do not have audited financial statements nor do they file other corporate financial information such as a 10-K.

Deloitte LLP and its subsidiaries (the "U.S. Firms") provide audit, tax, consulting, and financial advisory services through over 51,000 people in 89 U.S. cities. For the fiscal year ended May 28, 2011, the U.S. Firms had revenue of U.S. \$1.2 billion.

Deloitte accepts in principle the contract terms and conditions as referenced in the RFP as drafts of certain provisions of a contract, the final terms of which will be negotiated by ACDHS and Deloitte if we are chosen for negotiations. We recognize that, as with all complex engagements, there will be certain clarifications to the requirements in the RFP that the parties may wish to negotiate prior to initiation of the project, based on the requirements of the engagement as finally awarded. ACDHS and Deloitte have successfully reached agreement on terms and conditions in the past and in the event we are selected, we are committed to working in good faith with ACDHS to reach prompt agreement on the final terms applicable to this project.

## 4. References

### RFP Reference: 2. Narrative, References, Page 7

References (1 page limit) Provide the name, affiliation and contact information (include email address and telephone number) for three references who have direct knowledge of and can address the current and/or past experience of your organization relevant to the services sought through this RFP.

<b>Client Reference</b>	
<b>Project Description</b>	
<b>Client Reference</b>	
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<b>Client Reference</b>	
<b>Project Description</b>	
<b>Client Reference</b>	
<b>Project Description</b>	



## 5. Required Attachments

**RFP Reference: 5. Required Attachments, Page 7**

- a. Cover Page – included in Narrative file
  - b. MWDBE Participation Statement form – attached as a separately document as part of email submission
  - c. W9 – included in Narrative file
  - d. Vendor Creation Form - attached as a separately document as part of email submission
  - e. CVs/resumes – included in Narrative file
  - f. Organizational chart – included in Narrative file
-

## Attachment c.

W9

RFQ Reference: 5. Required attachments, Page 7

W9

<b>Form</b> <b>W-9</b> (Rev. December 2014) Department of the Treasury Internal Revenue Service	<b>Request for Taxpayer Identification Number and Certification</b>	<b>Give Form to the requester. Do not send to the IRS.</b>										
<b>1</b> Name (as shown on your income tax return). Name is required on this line; do not leave this line blank. <b>DELOITTE CONSULTING LLP</b>												
<b>2</b> Business name/disregarded entity name, if different from above												
<b>Print or type See Specific Instructions on page 2.</b>	<b>3</b> Check appropriate box for federal tax classification; check only <b>one</b> of the following seven boxes: <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ <b>Note.</b> For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner. <input type="checkbox"/> Other (see instructions) ▶											
	<b>4</b> Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <small>(Applies to accounts maintained outside the U.S.)</small>											
	<b>5</b> Address (number, street, and apt. or suite no.) <b>4022 SELLS DRIVE</b>											
	<b>6</b> City, state, and ZIP code <b>HERMITAGE, TN 37076</b>											
	<b>7</b> List account number(s) here (optional)											
<b>Part I Taxpayer Identification Number (TIN)</b> Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see <i>How to get a TIN</i> on page 3. <b>Note.</b> If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.												
<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td colspan="2" style="text-align: center;"><b>Social security number</b></td></tr><tr><td style="width: 33%; text-align: center;">[ ][ ]-[ ][ ]-[ ][ ][ ][ ][ ]</td><td style="width: 67%;"></td></tr><tr><td colspan="2" style="text-align: center;"><b>or</b></td></tr><tr><td colspan="2" style="text-align: center;"><b>Employer identification number</b></td></tr><tr><td colspan="2" style="text-align: center;">[ ][ ][ ][ ]-[ ][ ][ ][ ]-[ ][ ][ ][ ][ ][ ]</td></tr></table>			<b>Social security number</b>		[ ][ ]-[ ][ ]-[ ][ ][ ][ ][ ]		<b>or</b>		<b>Employer identification number</b>		[ ][ ][ ][ ]-[ ][ ][ ][ ]-[ ][ ][ ][ ][ ][ ]	
<b>Social security number</b>												
[ ][ ]-[ ][ ]-[ ][ ][ ][ ][ ]												
<b>or</b>												
<b>Employer identification number</b>												
[ ][ ][ ][ ]-[ ][ ][ ][ ]-[ ][ ][ ][ ][ ][ ]												
<b>Part II Certification</b> Under penalties of perjury, I certify that: 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and 3. I am a U.S. citizen or other U.S. person (defined below); and 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct. <b>Certification instructions.</b> You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.												
<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 15%;"><b>Sign Here</b></td><td style="width: 45%;"><b>Signature of U.S. person ▶</b></td><td style="width: 40%;"><b>Date ▶</b> January 07, 2015</td></tr></table>			<b>Sign Here</b>	<b>Signature of U.S. person ▶</b>	<b>Date ▶</b> January 07, 2015							
<b>Sign Here</b>	<b>Signature of U.S. person ▶</b>	<b>Date ▶</b> January 07, 2015										
<b>General Instructions</b> Section references are to the Internal Revenue Code unless otherwise noted. <b>Future developments.</b> Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at <a href="http://www.irs.gov/w9">www.irs.gov/w9</a> . <b>Purpose of Form</b> An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following: • Form 1099-INT (interest earned or paid) • Form 1099-DIV (dividends, including those from stocks or mutual funds) • Form 1099-MISC (various types of income, prizes, awards, or gross proceeds) • Form 1099-B (stock or mutual fund sales and certain other transactions by brokers) • Form 1099-S (proceeds from real estate transactions) • Form 1099-K (merchant card and third party network transactions) • Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition) • Form 1099-C (canceled debt) • Form 1099-A (acquisition or abandonment of secured property) Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN. <b>If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding? on page 2.</b> By signing the filled-out form, you: 1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued), 2. Certify that you are not subject to backup withholding, or 3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and 4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See <i>What is FATCA reporting?</i> on page 2 for further information.												

Cat. No. 10231X

Form W-9 (Rev. 12-2014)

## Attachment e.

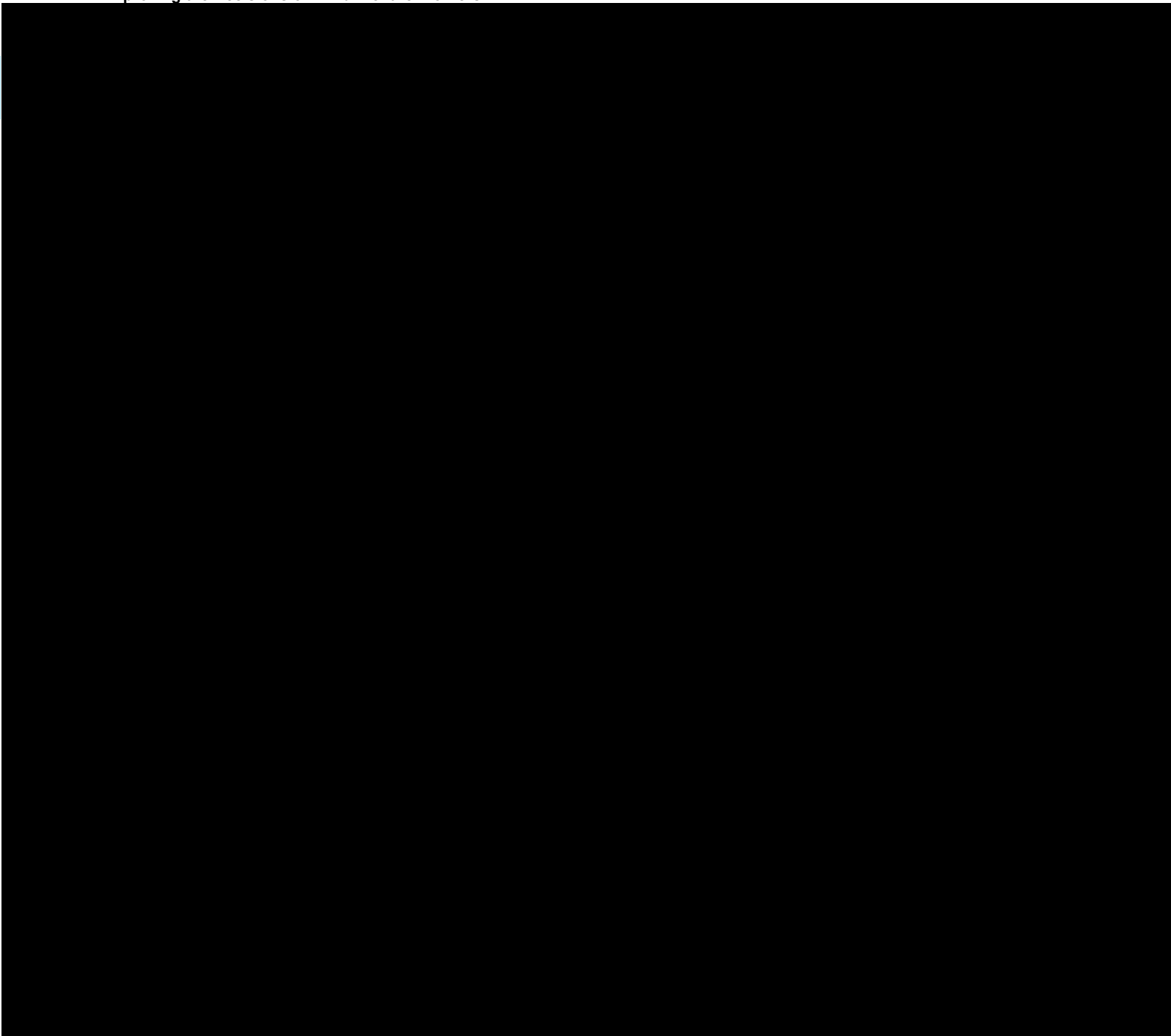
### CVs/Resumes

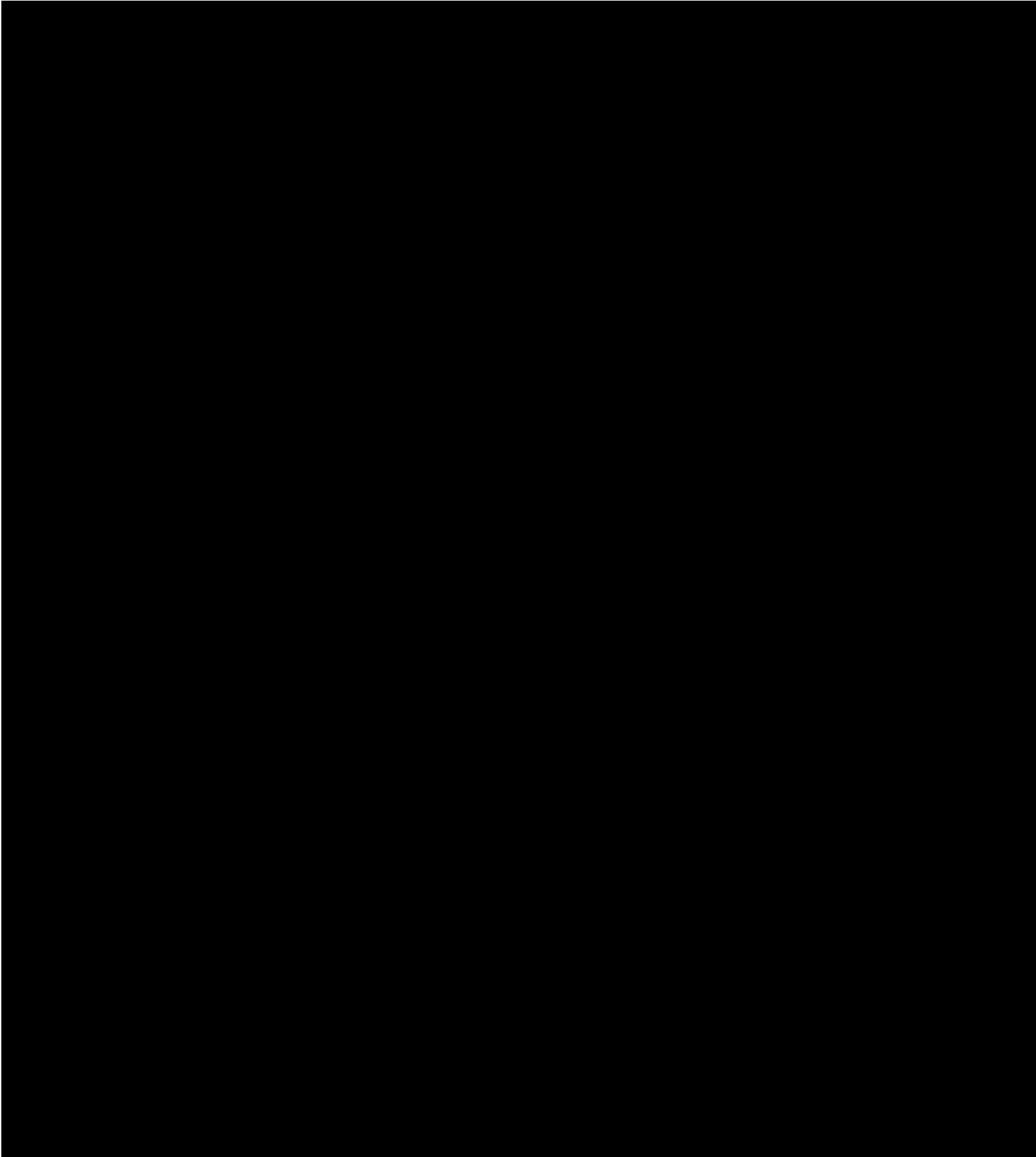
#### RFQ Reference: 5. Required attachments, Page 7

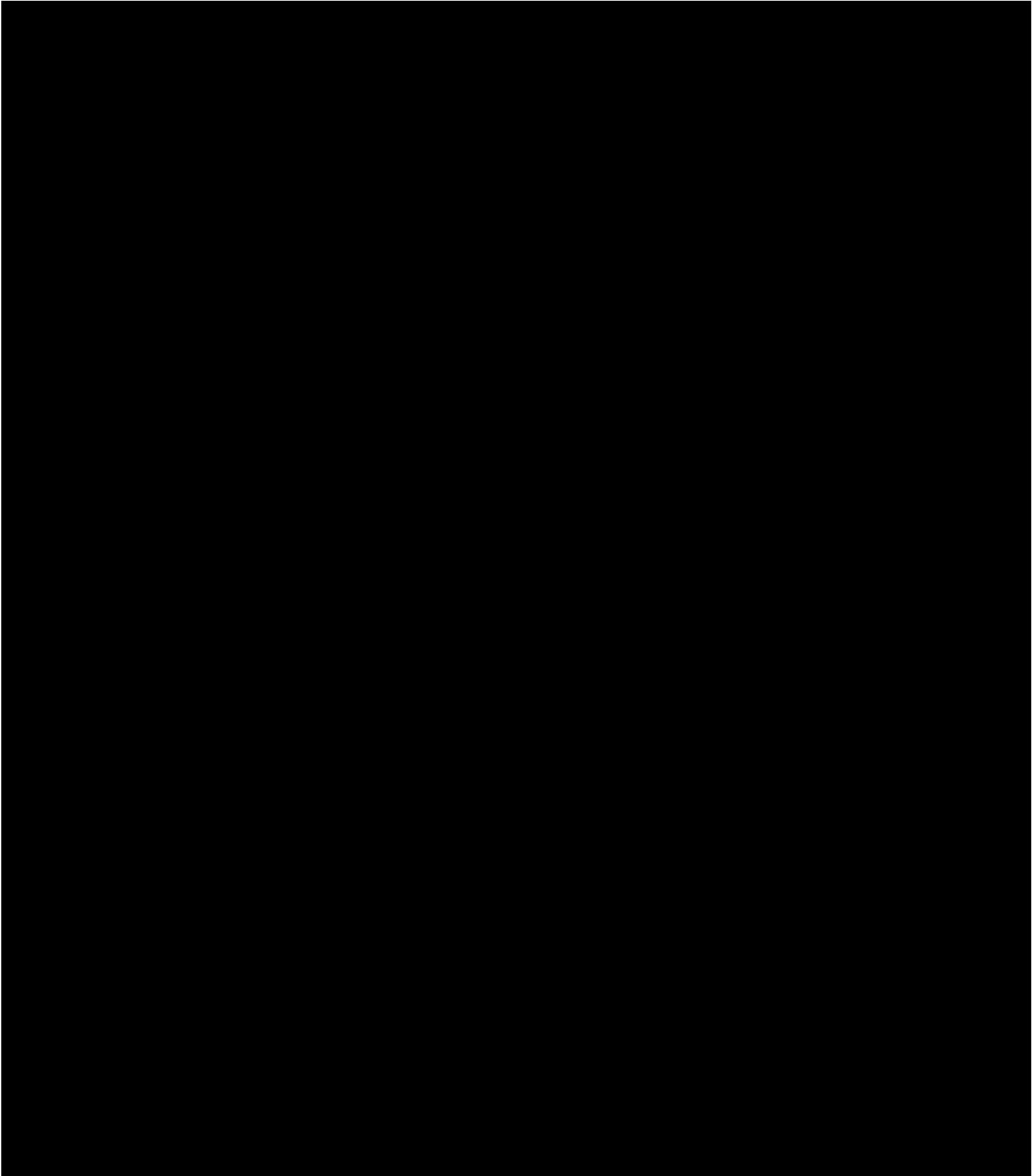
##### e. CVs/resumes

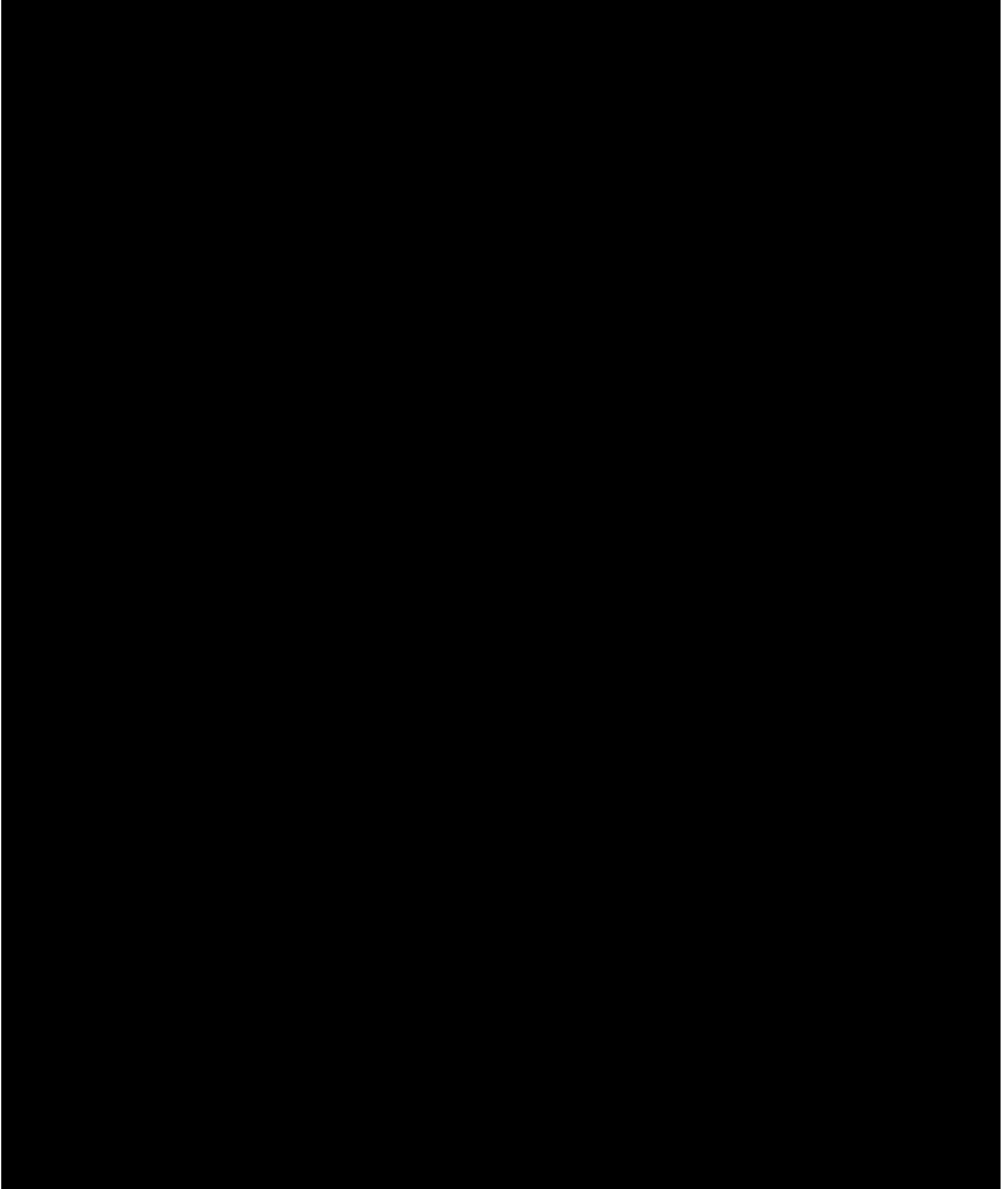
We are pleased to present to the Allegheny County Department of Human Services the resumes for our team. The following table highlights the individuals and their respective project roles.

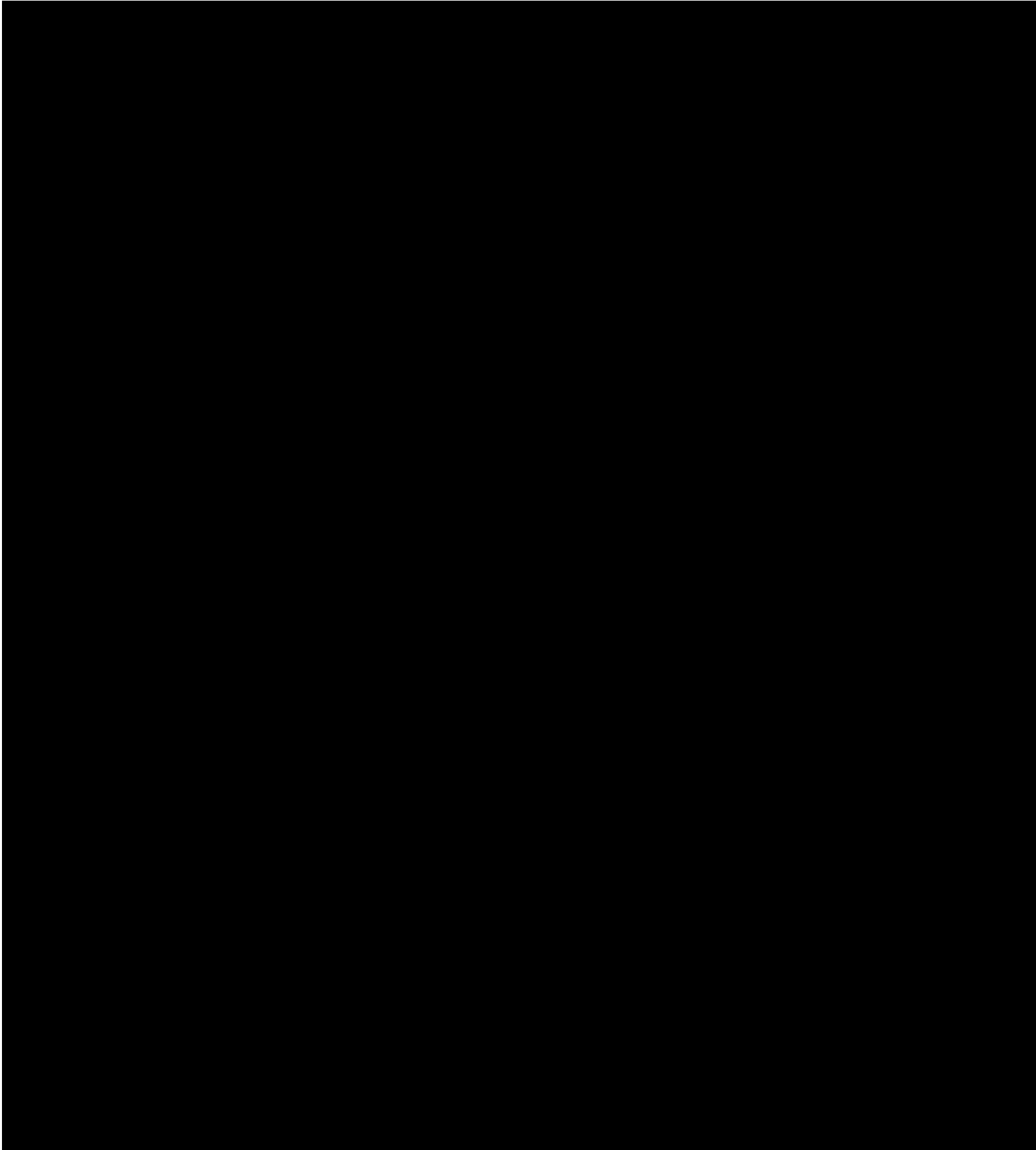
Name	Role
[REDACTED]	Lead Engagement Partner
[REDACTED]	Project Manager Advanced Analytics Lead
[REDACTED]	Child Welfare Process Analyst
[REDACTED]	Analytics Analyst
[REDACTED]	Project Advisor in Child Welfare
[REDACTED]	Project Advisor in Process and Impact Analysis
[REDACTED]	Project Advisor in Social Work Practice



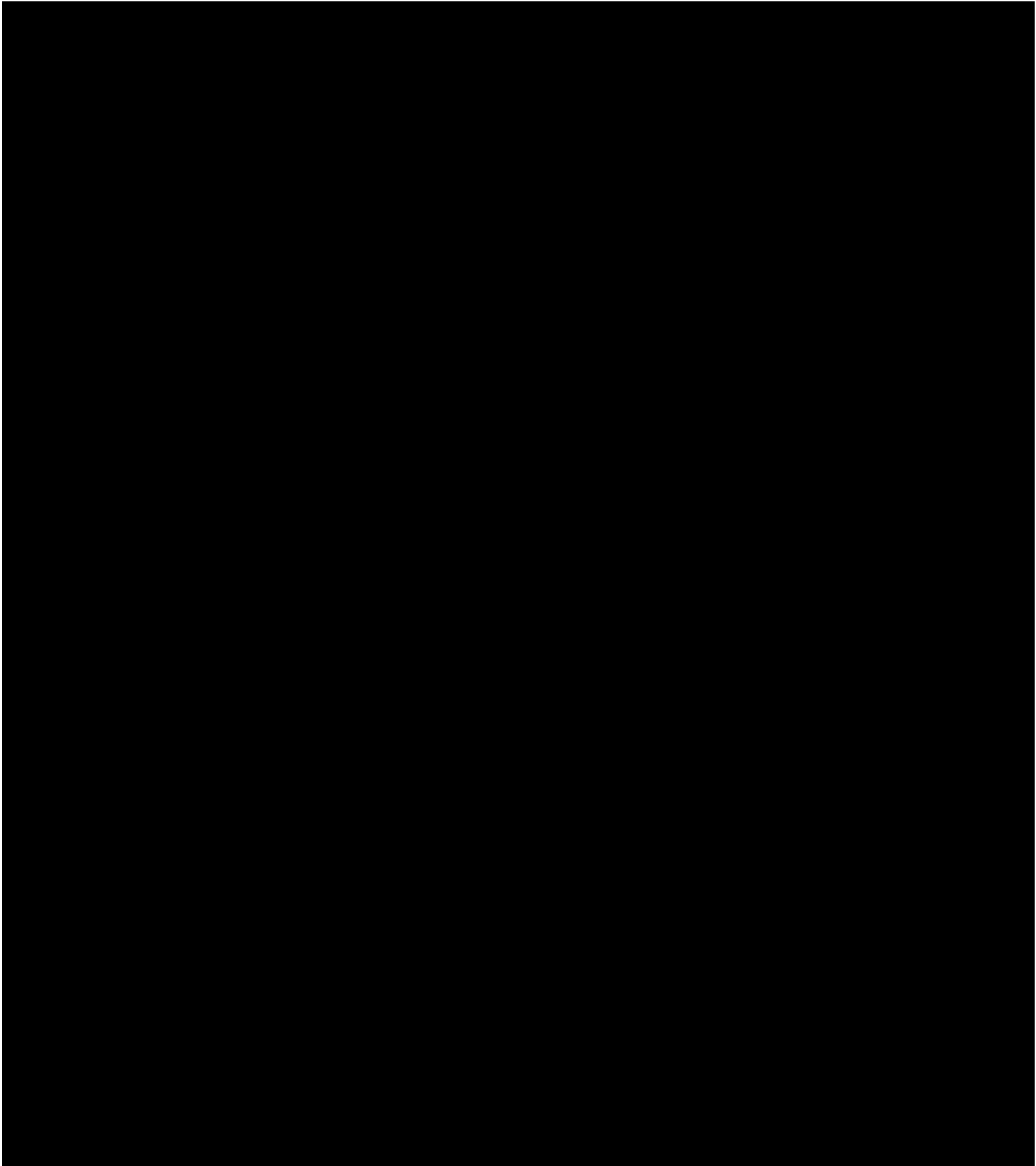


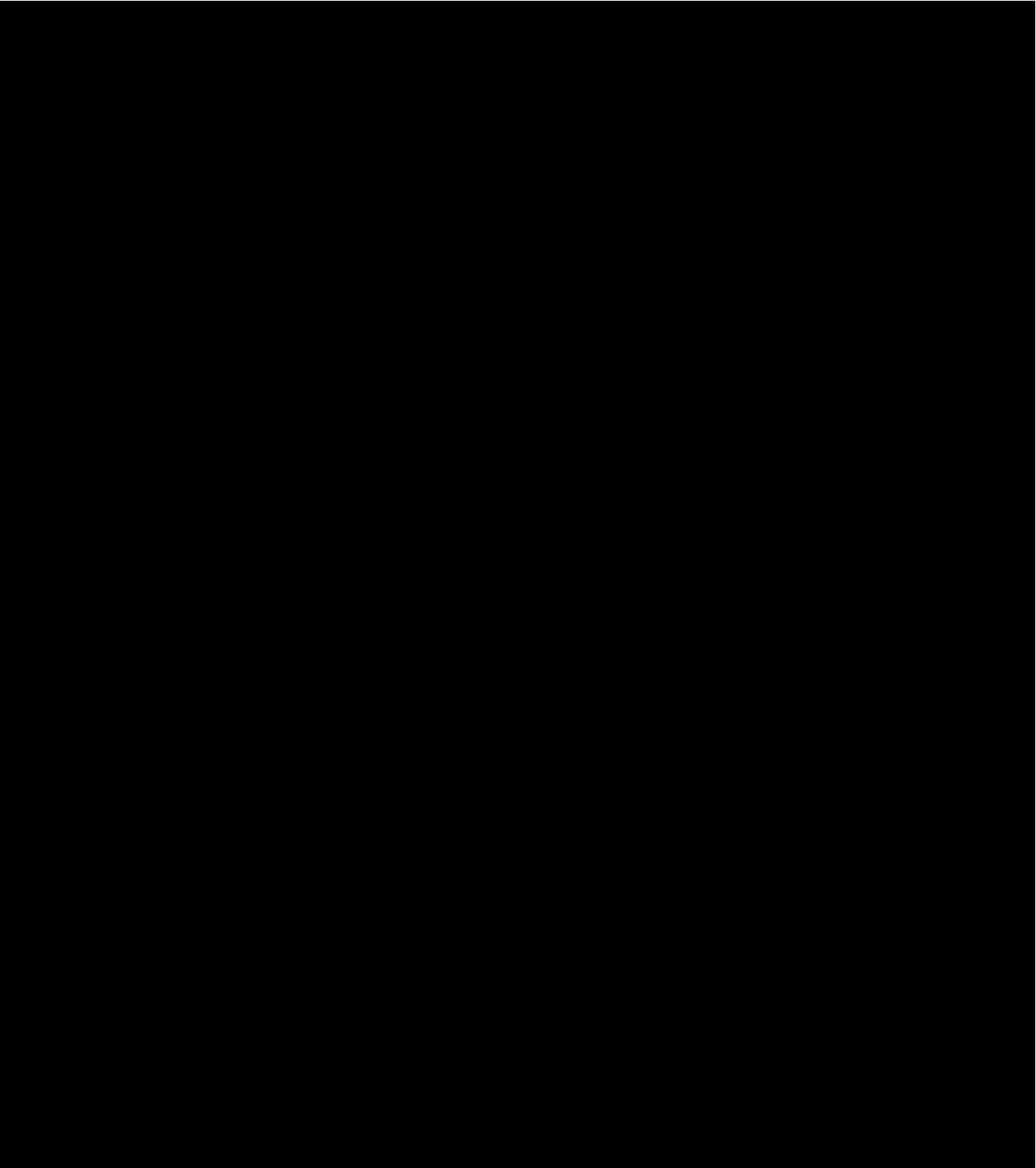


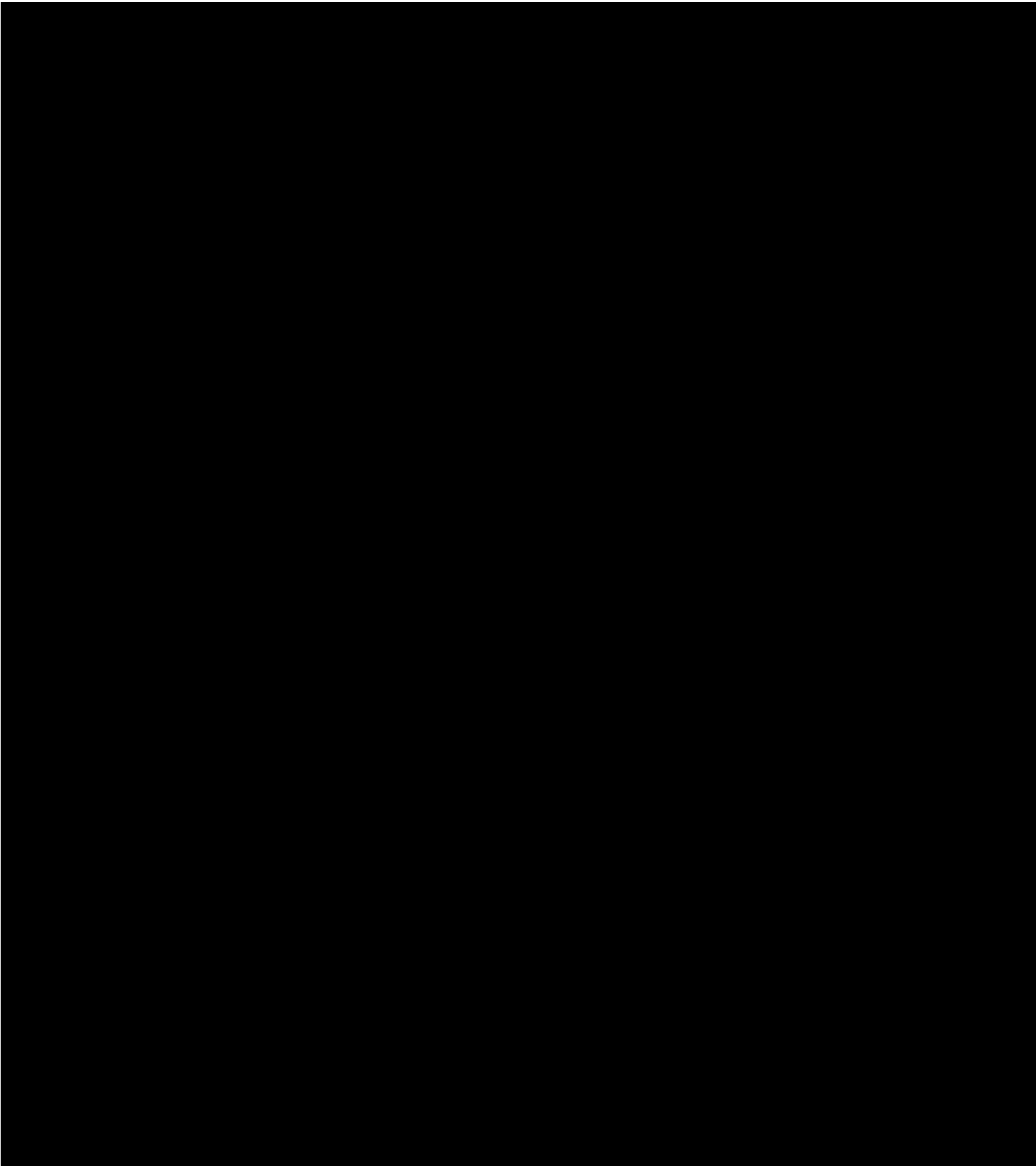


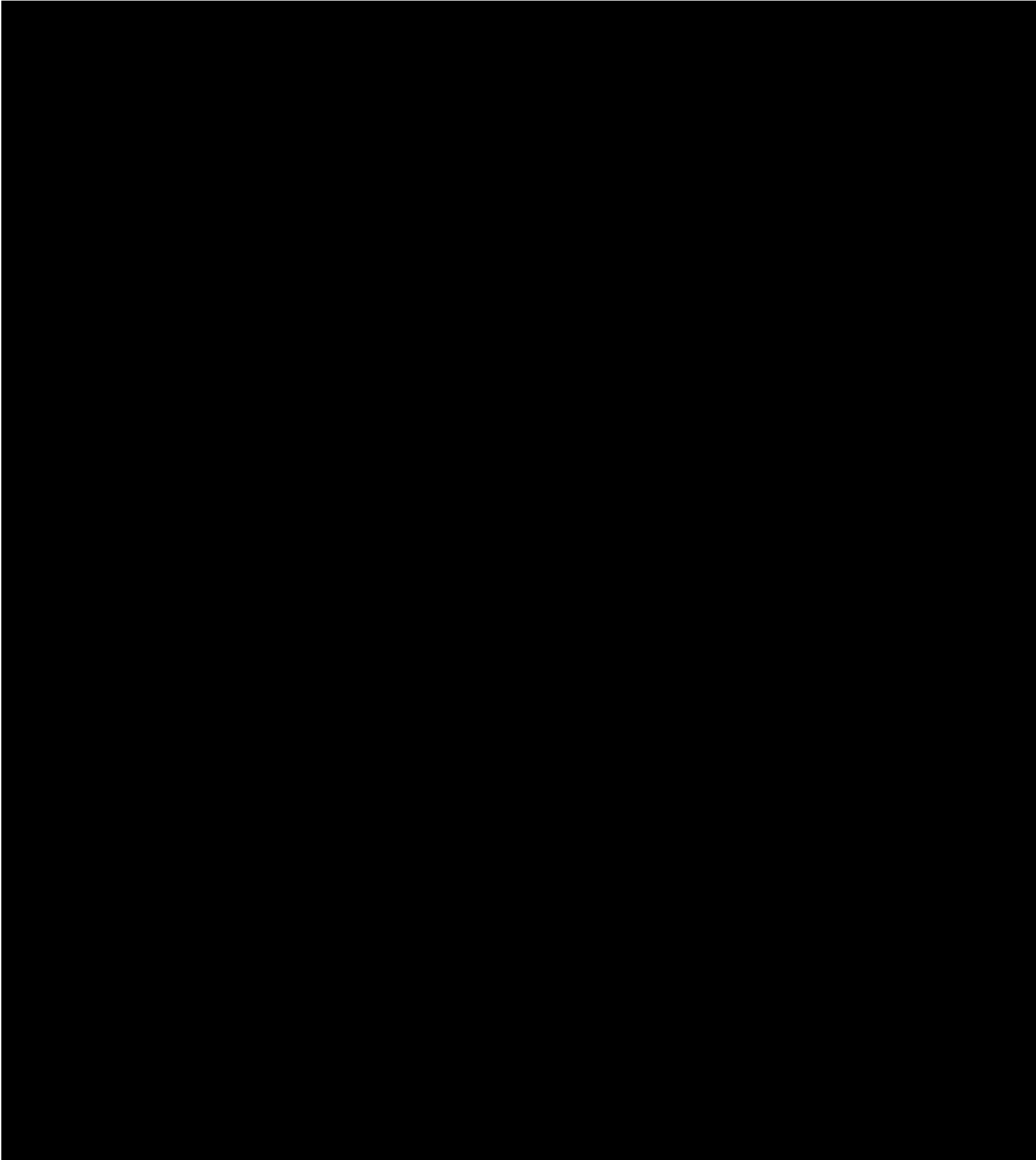


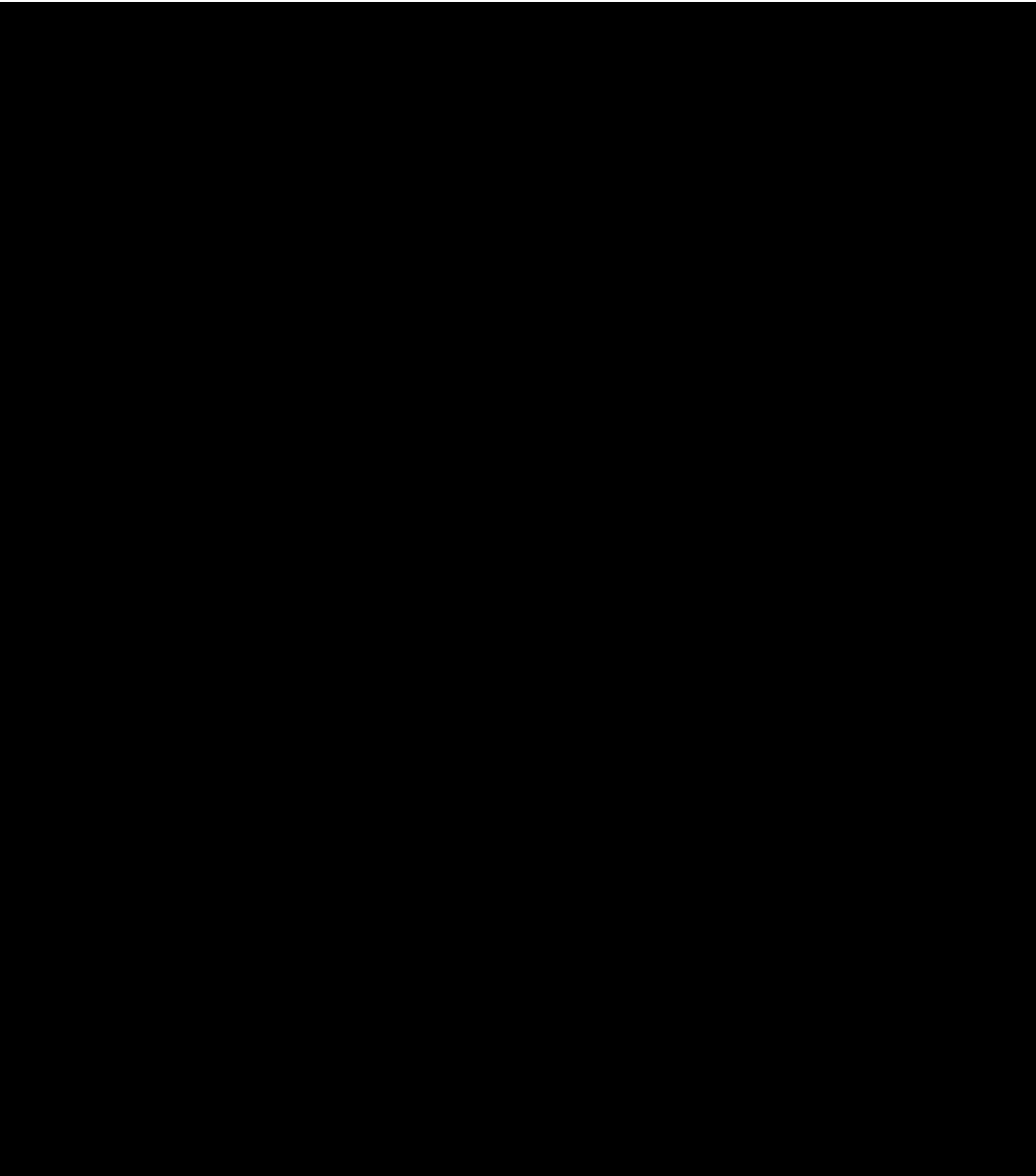


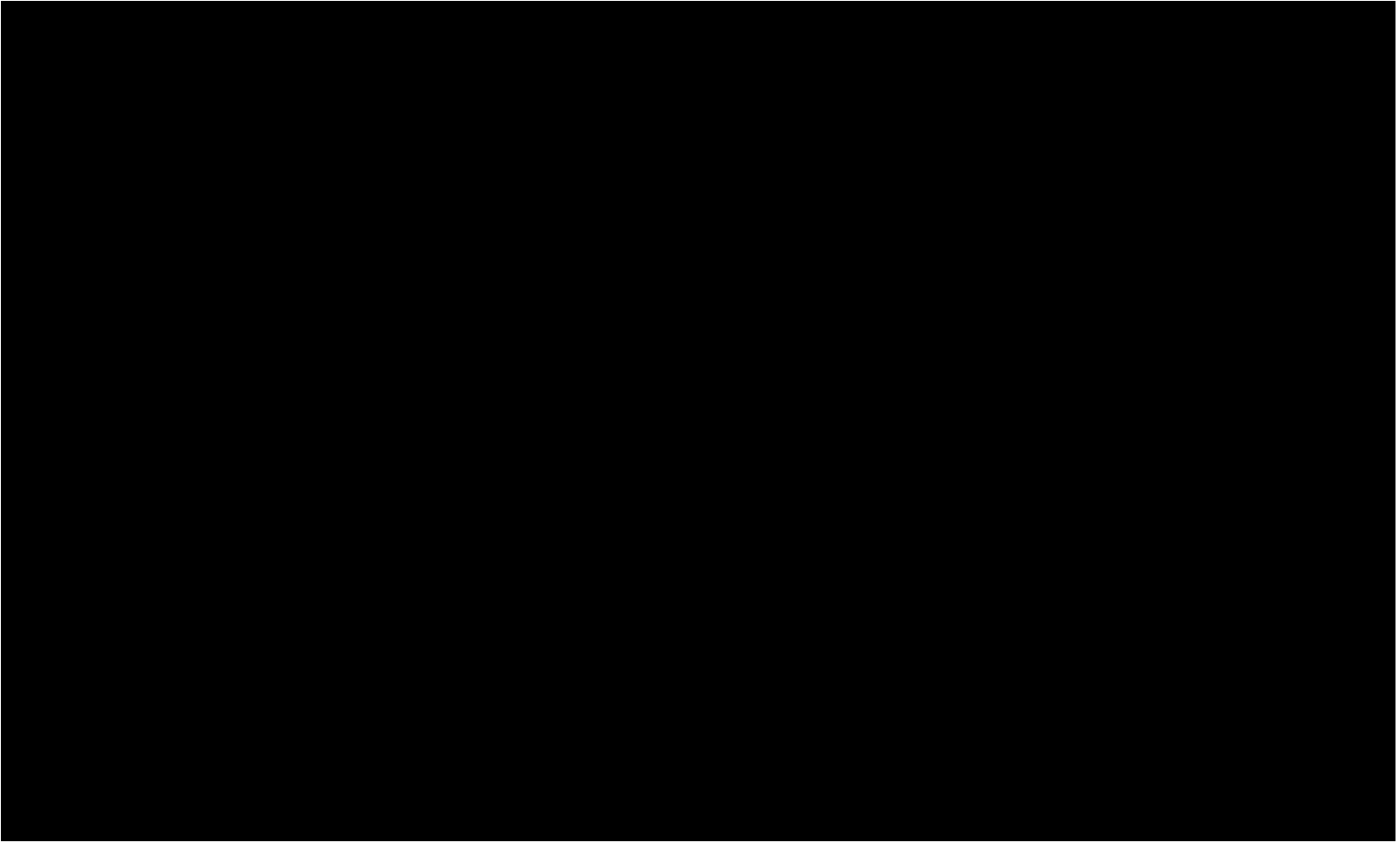




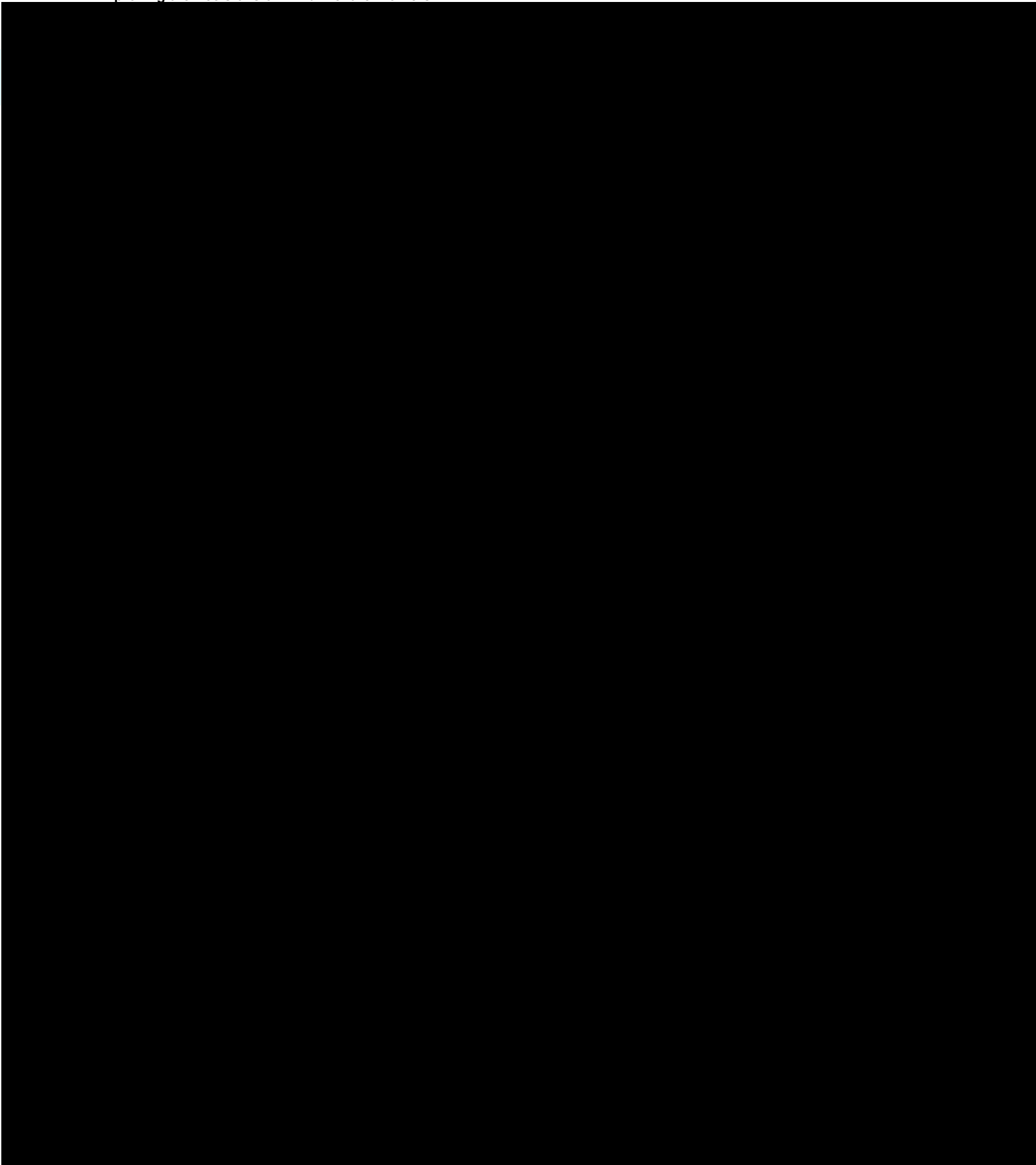










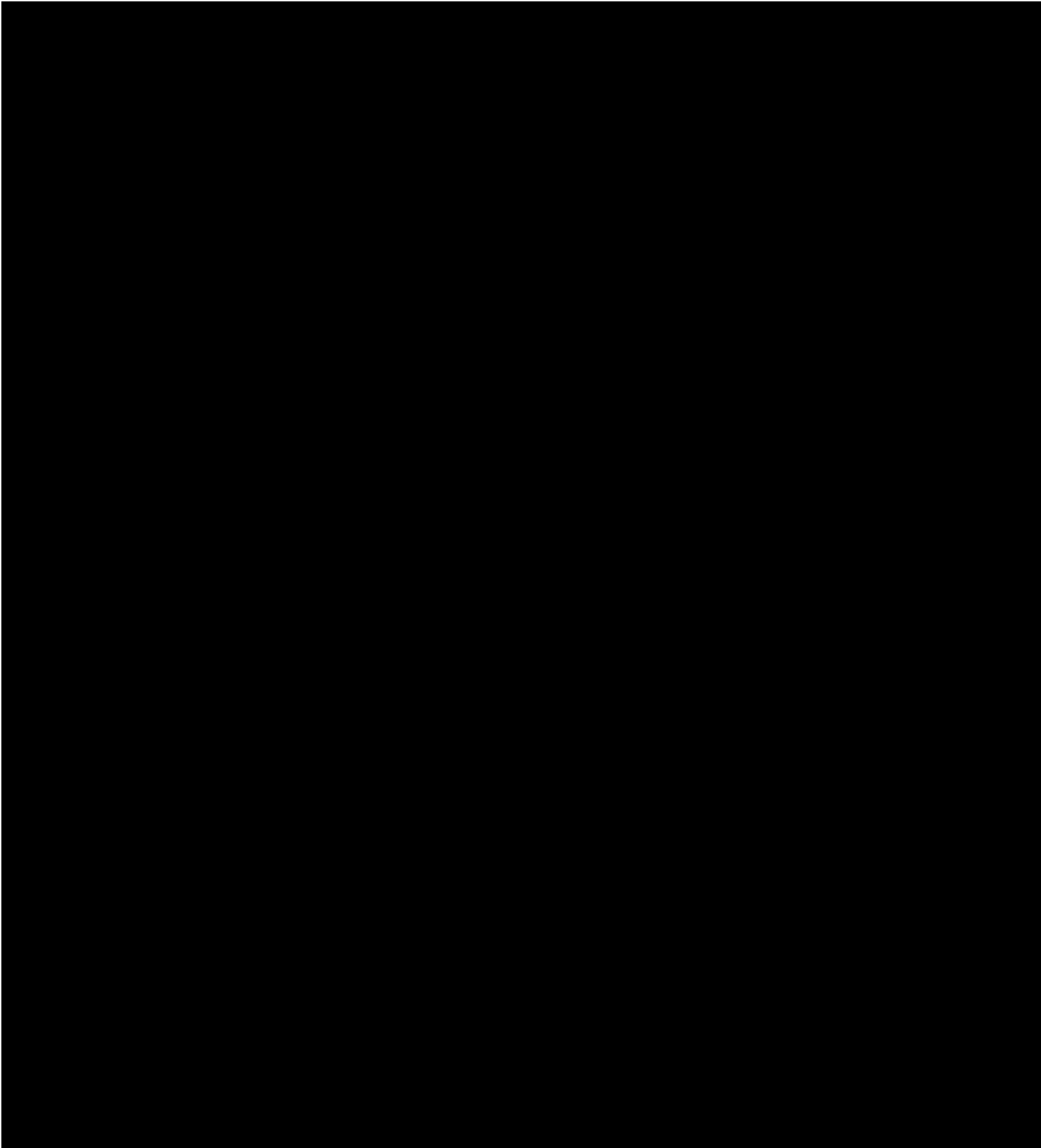


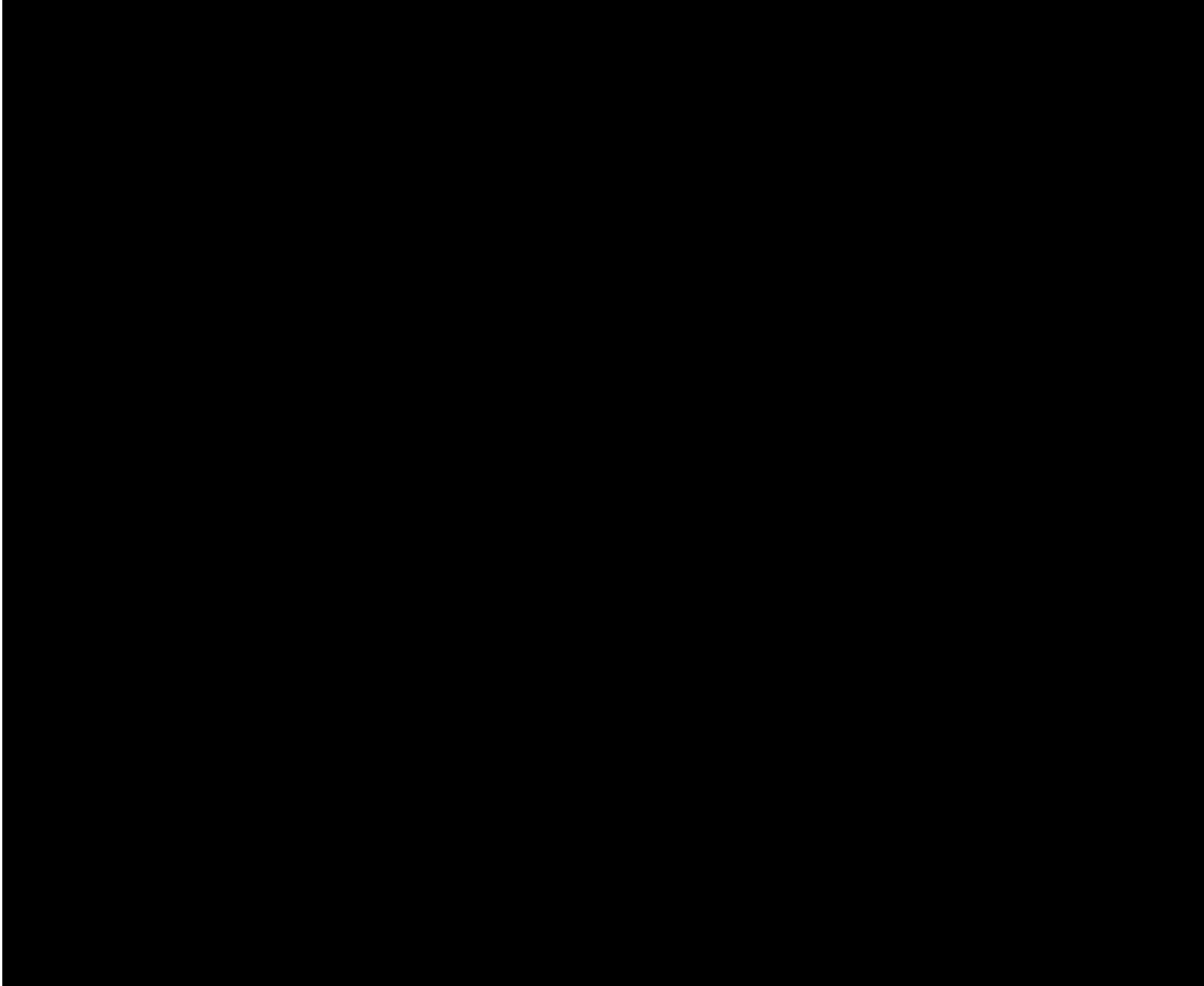




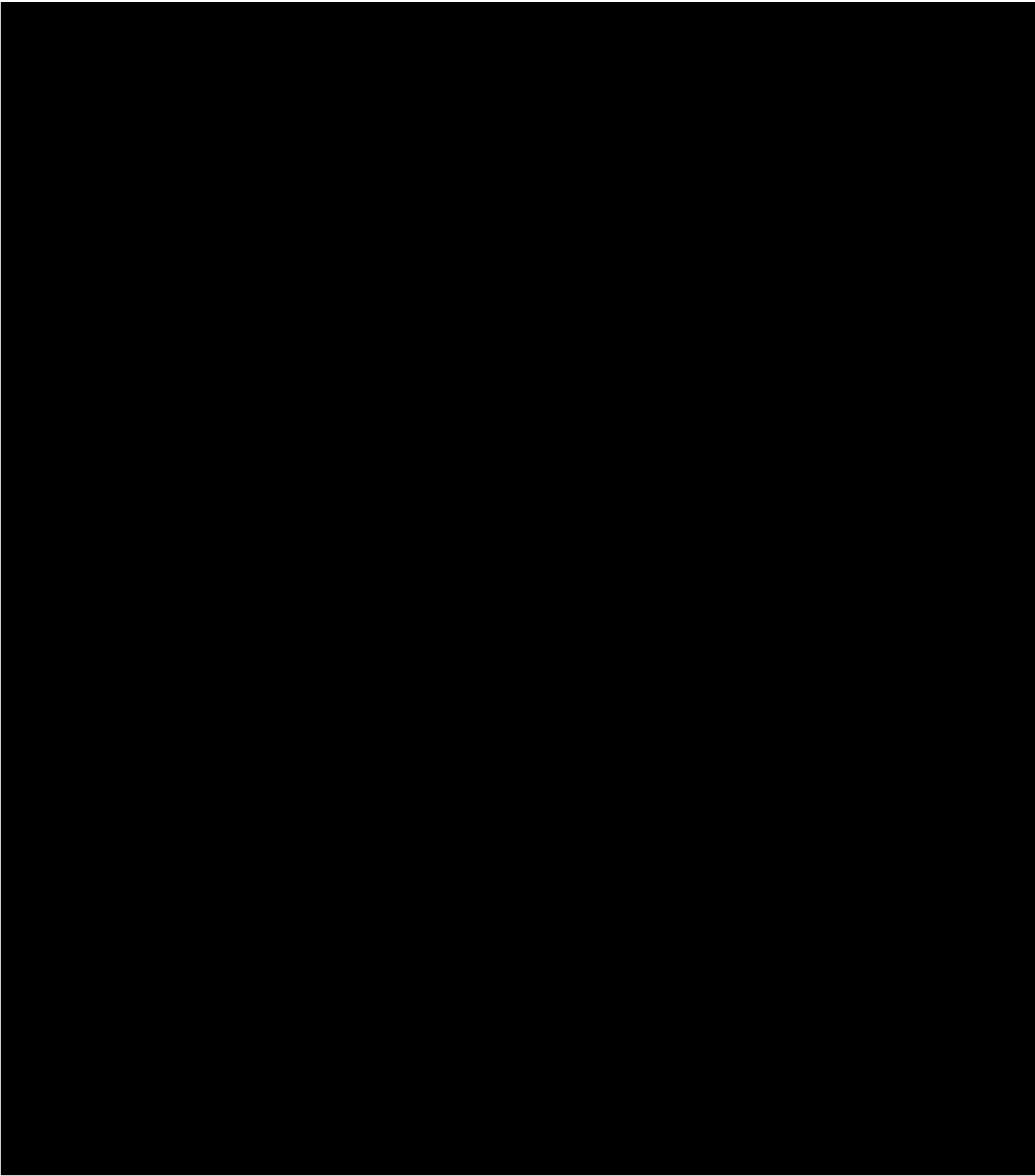










































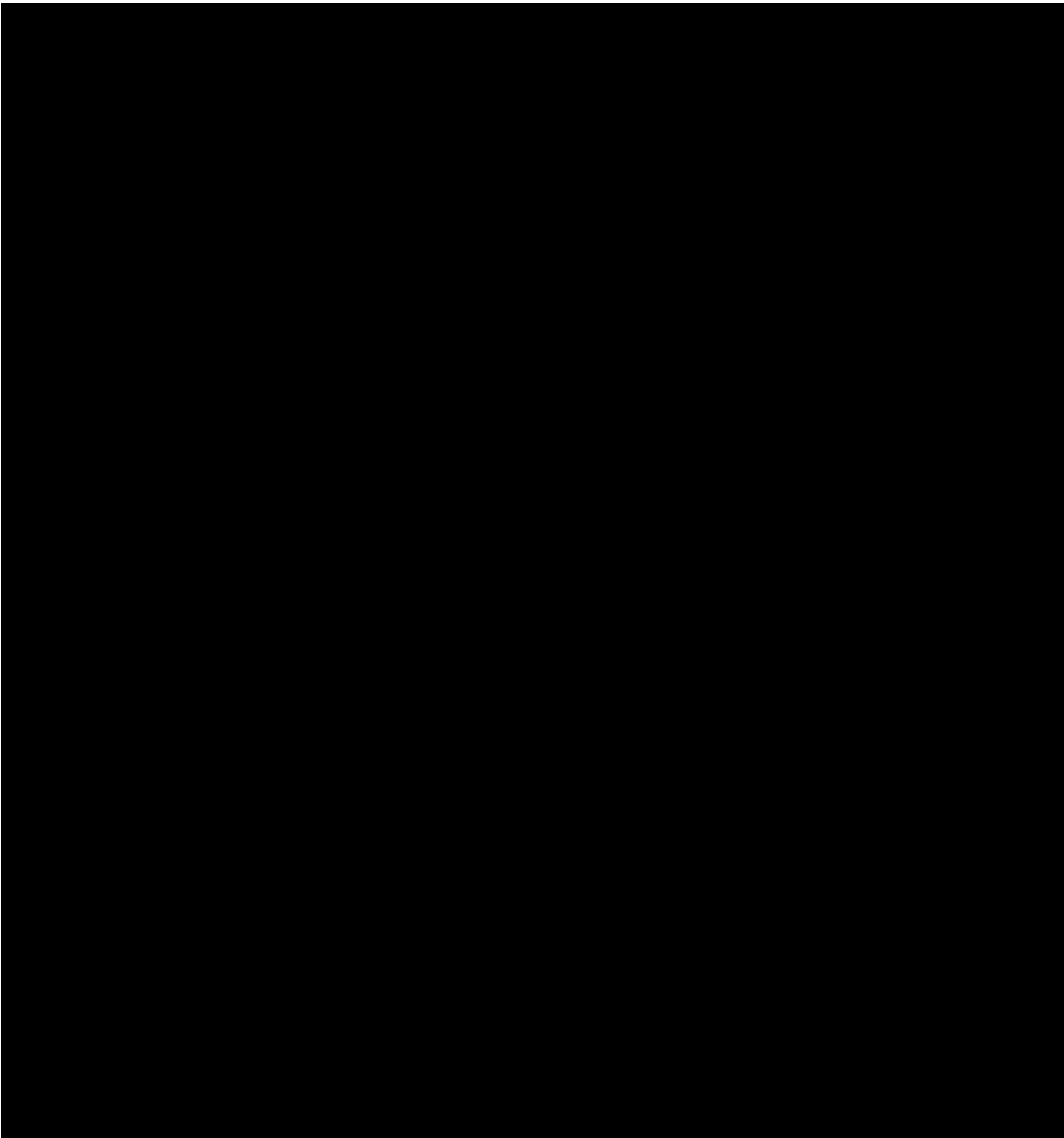












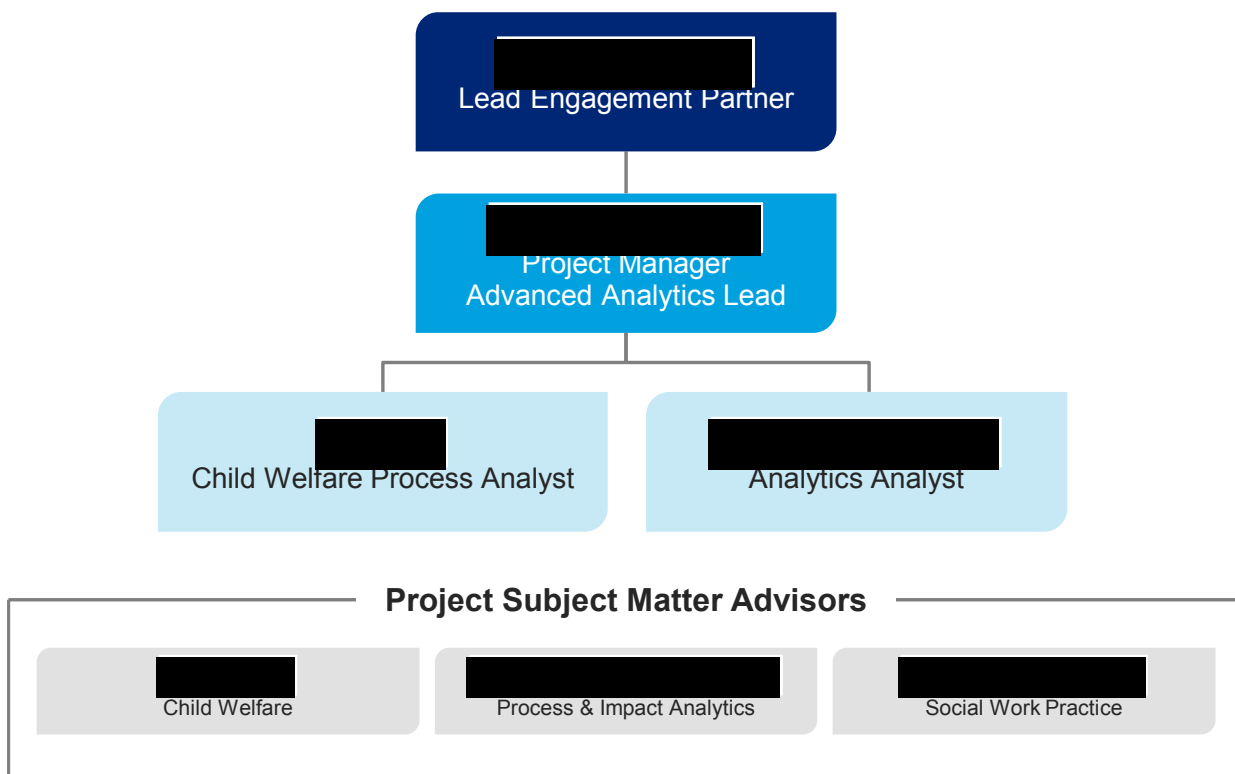


## Attachment f.

### Organizational Chart

RFQ Reference: 5. Required attachments, Page 7

e. Organizational Chart



Allegheny County Department of Human Services  
Request for Proposals  
Evaluation of a Predictive Risk Modeling Tool for Improving the Decisions of Child Welfare Workers  
January 4, 2016

Deloitte Budget Narrative

<b>Impact Evaluation</b>	Final deliverable will be a written document summarizing the findings of the impact evaluation	
<b>Process Evaluation</b>	Final deliverable will be a written document summarizing the findings of the process evaluation	
<b>TOTAL</b>		

# Allegheny County

Vendor Creation Form

Controller's use only:

Supplier No. \_\_\_\_\_

1099 Eligibility: ☐ Yes ☐ No

☐ Add ☐ Change Supplier No. 571863

## Company Information:

Deloitte- NO Change requested at this time – submitted form as part of RFP requirement

## Federal Tax ID (TIN)

Same as current supplier information

**Company Name** (Please type or print)

**Original W-9 must be attached**

### **Required information** **Type of Service Provided**

- |  |                                     |
|--|-------------------------------------|
| <input type="checkbox"/> Independent Contractor        | <input type="checkbox"/> Rent       |
| <input type="checkbox"/> Maintenance/Service Agreement | <input type="checkbox"/> Care Giver |
| <input type="checkbox"/> Insurance                     | <input type="checkbox"/> Legal      |
| <input type="checkbox"/> Personal Reimbursement        | <input type="checkbox"/> Medical    |
| <input type="checkbox"/> Other (please list)           |                                     |

### **Type of Commodity Provided**

(please describe below)

No change requested

## **Required Information**

### **Minority Or Women Owned**

☐ Yes ☐ No

If yes select ethnicity and gender of the vendor below:

- |                          |                             |
|--------------------------|-----------------------------|
| <input type="checkbox"/> | Asian Pacific American      |
| <input type="checkbox"/> | Black American              |
| <input type="checkbox"/> | Hispanic American           |
| <input type="checkbox"/> | Native American             |
| <input type="checkbox"/> | Subcontinent Asian American |
| <input type="checkbox"/> | Non-Minority Woman          |
| <input type="checkbox"/> | Other                       |

If Yes ☐ Male ☐ Female

Certified By: ☐ PAUCP ☐ PADGS ☐ Non PA Certification

(attach copy of certification)

### **Non-Profits including Faith Based Organizations**

- ☐ Faith Based Non-Minority
- ☐ Faith Based Minority
- ☐ African American Non-Profit
- ☐ Other Non-Profit

### **Outreach Manager Interface**

☐ Yes ☐ No

**Industry Classification by NAICS Code**

Primary Industry \_\_\_\_\_

Secondary Industry (if applicable) \_\_\_\_\_

\*If code is not known go to <http://www.census.gov/epcd/naics02/naicod02.htm> and select the correct code.

**Required Information**

**Supplier/Remit To Information (Search Type "V")** – (Where check will be mailed for payment. Check must be made payable to exact name listed under TIN provided or check cannot be processed.)

**Please print or type**

Supplier/Payee Name \_\_\_\_\_

Address Line 1 \_\_\_\_\_

Address Line 2 \_\_\_\_\_

Address Line 3 \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

ZIP Code \_\_\_\_\_

Telephone Number \_\_\_\_\_

Fax Number \_\_\_\_\_

\*If the "remit to" information provided on form does not match invoices submitted for payment, the Controller's Office MUST contact supplier to verify address information before payments are processed. Thank you for your cooperation.

If the Allegheny County Department with which you do business is known, providing the information below will help in the processing of your payments. **Failure to include the information may result in processing delays.**

**Allegheny County****Departmental Contact**

Name \_\_\_\_\_

Telephone  
No. \_\_\_\_\_

Fax No. 412-350-3414 \_\_\_\_\_

EMail  
Address: @AlleghenyCounty.us \_\_\_\_\_**Supplier/Payee Contact Name**

Name \_\_\_\_\_

Telephone No. \_\_\_\_\_

Fax No. \_\_\_\_\_

Email Address: \_\_\_\_\_



# COUNTY OF ALLEGHENY

## M/W/DBE PARTICIPATION STATEMENT

Failure to complete this form and submit it with your contract may cause delays in processing

### SOLICITATION AND COMMITMENT

MINORITY, WOMEN AND DISADVANTAGED BUSINESS ENTERPRISES

FISCAL YEAR/PERIOD	NAME OF PROVIDER	ADDRESS	PHONE NUMBER
3/2016 - 5/2016	Deloitte	2600 One PPG PI, Pittsburgh, PA 15222-5433	+1.717.651.5367

List below ALL M/W/DBE's that were solicited - whether or not commitment was obtained - Copy this form as necessary

MBE <input type="checkbox"/> WBE <input type="checkbox"/> DBE <input type="checkbox"/>	TYPES OF SUBCONTRACT WORK OR MATERIALS	DATE SOLICITED	COMMITMENT MADE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO (IF YES GIVE DATE) MO DAY YR	GIVE REASON(S) IF NO COMMITMENT MADE
CERTIFIED BY:				
COMPANY NAME		SOLICITATION METHOD		The nature of the services requested by ACDHS are highly specialized and require the use of specific Deloitte methodologies.
ADDRESS			AMOUNT COMMITTED	
CONTACT PERSON/PHONE		QUOTE RECEIVED <input type="checkbox"/> YES <input type="checkbox"/> NO	\$	
EMAIL			% OF TOTAL BID	
MBE <input type="checkbox"/> WBE <input type="checkbox"/> DBE <input type="checkbox"/>	TYPES OF SUBCONTRACT WORK OR MATERIALS	DATE SOLICITED	COMMITMENT MADE <input type="checkbox"/> YES <input type="checkbox"/> NO (IF YES GIVE DATE) MO DAY YR	GIVE REASON(S) IF NO COMMITMENT MADE
CERTIFIED BY:				
COMPANY NAME		SOLICITATION METHOD		
ADDRESS			AMOUNT COMMITTED	
CONTACT PERSON/PHONE		QUOTE RECEIVED <input type="checkbox"/> YES <input type="checkbox"/> NO	\$	
EMAIL			% OF TOTAL BID	
MBE <input type="checkbox"/> WBE <input type="checkbox"/> DBE <input type="checkbox"/>	TYPES OF SUBCONTRACT WORK OR MATERIALS	DATE SOLICITED	COMMITMENT MADE <input type="checkbox"/> YES <input type="checkbox"/> NO (IF YES GIVE DATE) MO DAY YR	GIVE REASON(S) IF NO COMMITMENT MADE
CERTIFIED BY:				
COMPANY NAME		SOLICITATION METHOD		
ADDRESS			AMOUNT COMMITTED	
CONTACT PERSON/PHONE		QUOTE RECEIVED <input type="checkbox"/> YES <input type="checkbox"/> NO	\$	
EMAIL			% OF TOTAL BID	

Prepared By:	Title:	Date:	Signature
	Principal, Deloitte	1/4/2016	